TELEPHONE 1852 NUMBER

THE CHEMIST AND DRUGGIST

TELEGRAPHIC ADDRESS CHEMICUS LONDON.

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Branch Offices: MELBOURNE, SYDNEY, and NEW YORK.

ESTABLISHED IN

ENGLAND ... 1859. AUSTRALASIA ... 1885.

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No. 490. Vol. XXXV. SEPTEMBER 7, 1889.

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Silver Medal, Health Exhibition, 1884

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A NOURISHING MEAT AND MALT WINE.

Strongly recommended by the Medical Faculty in all cases of weakened constitution, and particularly useful in cases of ladies, whilst nursing, and delicate children, or in ailments where a stimulating—digestive—tonic—nutrient is indicated

Dose—A quarter to Two Ounces twice daily.

In Bottles, 2s. 6d., 5s., and 7s. 6d.

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HOOPER'S SPARKLING SELTZER

2/6 per dozen. Six dozen Carriage free.

PURE SODA, PURE POTASH, LEMONADE, AND AROMATIC GINGER ALE.

Special Terms for Quantity.

Exchange Column, p. 8. Advertisers' and Buyers' Reference List and Index to Advertisements, pp. 21-23.

MAY & BAKER

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BATTERSEA, LONDON, S.W.

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BENZOIC ACID AND ALL BENZOATES.

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IN BELLS OR TABLETS, BY A NEW PATENT PROCESS.

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MESSRS. ELLIMAN, SONS & CO., SLOUGH, ENGLAND,

ARE NOW ISSUING, FREE TO ANY ADDRESS,
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ENAMELLED IRON TABLETS,

Size 20 inches by 18 inches, with their registered (in all countries) Trade Mark upon them, to Chemists who will undertake to affix them permanently in a conspicuous position outside their premises.

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SIZES—
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PLEASE STATE WHICH.

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"I have had over twenty-five years' experience as job-master in this city of Oporto, Portugal, and can safely declare I never, during my experience, used such a perfect remedy, and shall recommend it to everyone I know it would be useful to.
"GEORGE HENRY CORKER.
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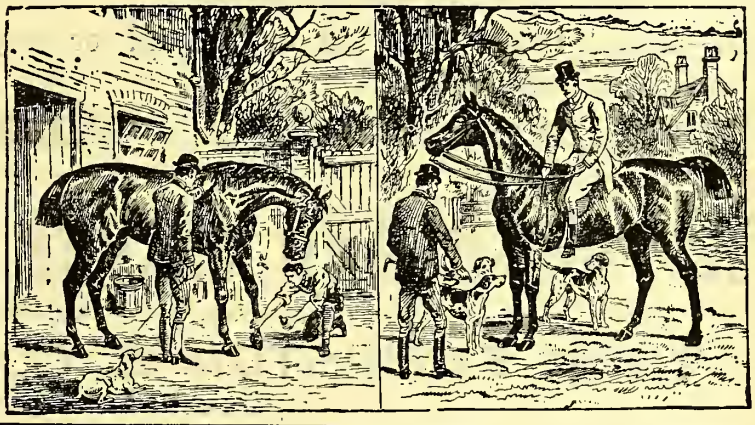

READ.

"I find they greatly assist the sale of the Embrocation."
J. A. JORDAN, 44 Low Hill, Liverpool, Sept. 4th, 1888.

CLIMBED WESTERHAM HILL AND WON THE RACE

"Whilst trying Westerham Hill last Thursday, previous to the competition which took place on the following Saturday I severely sprained the muscles of my right leg, and thought at the time it would be quite out of the question to get right again in time for the competition. However, I was advised by a fellow cyclist to try Elliman's Embrocation, which I did, freely, using half a bottle in a bath and rubbing in the remainder with my hand, with such success that I was able to ride the next day and win the day after.
"W. CHATER LEA, North Road Cycling Club, August 22nd, 1888."

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OBSERVE. The Sale of these Preparations is increasing rapidly in all parts of the world, to a very great extent through persons recommending them to others. No tricky advertisements issued, nor are Press Notices accepted offered to secure an order for advertising.

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"Coffee which makes the politician wise,
And see through all things with his half-shut eyes."—*Pope.*

1.—THAT THOS. SYMINGTON & CO.'S "EDINBURGH" COFFEE ESSENCES have the Largest Family Sale throughout the World. Pure and Strong.

2.—THAT their DANDELION COFFEE ESSENCE affords great Relief to Sufferers from Biliousness or Indigestion, and is highly praised.

"One sip of this will bathe the drooping spirits in delight
Beyond the bliss of Dreams. Be wise, and taste!"—*Milton.*

3.—THAT their "PERFECT" MALT EXTRACT contains more active principle (*Diastase*) than any other kind, and is therefore invaluable for Children and Invalids.

4.—THAT "for the Table, the Nursery, or the Sick Room, these preparations are indispensable."

5.—THAT those who sell or use all or any of these will favourably remember

SYMINGTON, EDINBURGH.

12—GOLD AND SILVER MEDALS—12

Have been Awarded the following Specialties of

THOS. SYMINGTON & CO., EDINBURGH,

For Purity and Excellence of Quality:—

Essence of Pure Coffee	In 6d., 1s., and 2s. Bottles.
Do. Coffee and Chicory...	In do. do.
Do. Dandelion Coffee	In 1s. and 2s. Bottles.
"Edinburgh" Coffee and Milk	In 1-lb. Tins.
"Edinburgh" Chocolate and Milk	In do.
"Edinburgh" Cocoa and Milk	In do.
Prepared Taraxacum (Dandelion)	In ¼ and ½ lb. Tins.
Do. do. with Pure Coffee	In do. do.
"Perfect" Malt Extract	In 8-oz. (fluid) Bottles.
Do. do. with Cod Liver Oil ...	In do. do.

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THOS. SYMINGTON & CO., EDINBURGH.

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Prize Medals, CALCUTTA & VIENNA, 1884 1883. LONDON 1881.

Telegraphic Address: "IODINE-LONDON."

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MANUFACTURERS OF PURE PHARMACEUTICAL CHEMICALS.

SPECIAL QUOTATIONS FOR SHIPMENT.

Acid. Sulphuric

Guaranteed best Concentrated Sulphur-made Sulphuric Acid, of full strength, packed in 4X42 lb. screw-stoppered jars with whiting, in strong iron-bound cases.

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All requirements for the Mineral Water Trade, Ice Companies, &c.—**Liquid Ammonia, Ether, Whiting, Fruit Essences, Soluble Essences, Lemon, Ginger Ale, &c., &c.,** of guaranteed purity and flavour, and at the closest possible prices.

Special Quotations for Quantities.

SUPPORT HOME INDUSTRIES

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YOURSELVES.

SAVARS FEEDING BOTTLES

Are of British Manufacture throughout.

ARE SOLD ONLY TO REGISTERED CHEMISTS.

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Are of British Manufacture.

ARE SOLD ONLY TO REGISTERED CHEMISTS.

SAVARS ENEMAS, SYRINGES, &c.,

Are of British Manufacture.

ARE SOLD ONLY TO REGISTERED CHEMISTS.

SAVARS TRUSSES, BANDAGES, BELTS, ELASTIC GOODS, &c., are of British Manufacture.

ARE SOLD ONLY TO REGISTERED CHEMISTS.

SAVARS PLAISTERS, including Rubber Combination,

Are of British Manufacture.

ARE SOLD ONLY TO REGISTERED CHEMISTS.

SAVARS ABSORBENT COTTON WOOL

Is British Make.

IS SOLD ONLY TO REGISTERED CHEMISTS.

SAVARS FOSSILINE, a true Hydrocarbon Jelly,

Is Manufactured only by Undersigned.

IS SOLD ONLY TO REGISTERED CHEMISTS.

SAVARS PERFUMERY, POMADES, TOILET REQUISITES, HOUSEHOLD REQUISITES, and Proprietary Articles generally

ARE SOLD ONLY TO REGISTERED CHEMISTS.

HAWLEY'S COUNTER ADJUNCTS.

Special Pharmaceutical and other useful preparations, artistically labelled, and, where desired, with Chemist's own name and address. For full list see Pamphlet, "List of Counter Adjuncts," supplied gratis on receipt of Business Card.

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EVANS, SONS & CO.

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EVANS, LESCHER & WEBB.

CANADA:

EVANS AND SONS (LIMITED).

An Offer to Chemists.

We are about to send literature on "Vinolia" to various chemists, and if all those chemists who have stocked our preparations will at once notify us of this fact by a post-card, we will, without delay, inform the medical men in their locality of the fact. In this way Chemists may increase somewhat their business, and doctors labour under the advantage of knowing precisely where our goods can be obtained.

"The Reason how we may."—"Vinolia" has proved itself a necessity in medical practice by its use in numberless cases of Eczema, some of them of very long standing having progressed to recovery. Not all cases have been cured, but this is no drawback, for reasonable people are not always looking for cure alls. One thing, however, can be said of "Vinolia," it is that it will, without fail and at once, relieve itching and irritation of the skin from any and every cause. For sunburns, after shaving, and for chafes, there probably has never been anything so satisfactory to use. There is one thing also that can be said of "Vinolia" Soap, and that is, that its distinctive characteristic is that it contains extra fatty matter, it is made from the very best and finest materials that can be procured, it is manufactured on the most absolutely scientific lines it is turned out in a perfectly neutral state, and if, peradventure, in washing, any free alkali is by any chance dissolved, its action upon the skin is completely provided against. It is of course well for all to bear in mind that the skin of the townsman, and those who lead a sedentary life, is not over abounding in fat, and tends to become dry and hard, and to lose its velvety feeling; all the more reason that a proper soap be used; all the more occasion then that the skin be promoted in its remedial efforts by such plastic emollient cream as "Vinolia."

Please send us a post card at once if you have stocked "Vinolia" and "Vinolia" Soap.

PRICES.

"*VINOLIA*" (for Eczema, Pruritus, &c.), 1*s.* 9*d.* *and* 6*s.* *per box.*
"*VINOLIA*" *SOAP* (*Toilet*), 2*s.* 6*d.* *per box of* 3 *tablets.*
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EXCHANGE COLUMN.

This section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week. Remittances payable to EDWARD HALSE.

TERMS

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of ½d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of The Chemist and Druggist, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as *e.g.*, £1 10*s.* 6*d.*

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6*d.* if the amount is £3 or under; and 1*s.* if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

FOR DISPOSAL.

Literature.

Pharmaceutical Journal, 1859 to 1877, 1*s.* year. 80/27.

Pharmaceutical Journal, 1841 to 1863, bound, 2*s.* volume; 1870 to 1885, unbound, 1*s.* 6*d.* volume; *Chemist and Druggist*, 1881 to 1888, 3*s.* volume. Griffith, Leamington.

Educational.

"Experimental Chemistry," by Castell-Evans; quite new. Robert Wilton, Chemist, Runcorn.

Materia medica cabinet (Tully's), 162 specimens, in good condition, price 5*s.* W., 131 Ramsden Road, Balham, S.W.

Wills' "Pharmacy," 4*s.*; "Materia Medica," 3*s.* 6*d.*; Whitla's "Materia Medica," 7*s.* 6*d.*; Thorpe's "Non-Metals," 2*s.* Cave, 6 Bailgate, Lincoln.

Wills' illustrated "Materia Medica," 5*s.*; "Elements of Pharmacy," 3*s.* 6*d.* (latest editions); Hurt & Barbour's "Manual of Gynæcology," new, 10*s.* 20/20.

Formulæ.

Reliable recipes, 6*d.* each; full set of 130 neatly copied in book, 7*s.* 6*d.*; send for list. "Chemist," Edwards, Wye, Kent.

Waterproof ink, will not "run" into paper, no asphaltum, no pigment; recipe 2*s.* 6*d.* Leonard, 65 Pleasant Street, Bolton.

elor of Music says:—"I have given it (waterproof ink) a fair trial, and find it excellent;" recipe 2*s.* 6*d.* Leonard, 65 Pleasant Street, Bolton.

Bandmaster says:—"It (waterproof ink) will be a boon;" recipe 2*s.* 6*d.* Leonard, 65 Pleasant Street, Bolton.

To Prescribing Chemists and others.—A really valuable preparation, syrup of copaiba, contains 20 drops of balsam in one teaspoonful; is not an emulsion; perfectly clear, palatable, and very effectual; this is genuine; worth £5; send 15 stamps for receipt. "Pharmacist," 18 Crown Street, Tidal Basin, E.

Why sell profitless patents? Make your own proprietaries, paying half profit and increasing customers. Send 1*s.* 6*d.* for any three recipes as under:—"Glycerine Cream," for chapped hands, rough skin, &c.; "Quinine and Iron Tonic," best made, pleasant, permanent; "White Oils," warranted equal to any, cost easy; "Tannen Gargle," very efficacious and pleasant; "Bronchelixir," concentrated tincture, cures influenza and chest affections. Samples 4*d.* each, free; also list of 400. Tom Brooks, Chemist, Hornsey, N.

Drugs and Chemicals.

28 lbs. red precip., 7 lbs. bismuth carbonate, Howard's; cash offers. 80/24.

Proprietary Articles.

Three 20-lb. kegs McDougall's sheep-dip, retail 11*s.*; what offers? 79/16.

Cheap, a large quantity of soiled and other patents. Apply, Raw, Chemist, Devonport.

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Mahogany bevel showcase, 65 × 12 × 6, splendid condition, sell cheap. Parker, 271 High Street, Camden Town, N.W.

The entire fittings of handsome pharmacy, solid mahogany, swan carboys, recess bottles, &c.; almost new. Apply, Barry & Phillips, Ealing, W.

Counter cases, bent glass, as Maw's A18, one 6 feet long, price 5*l.* 10*s.*; one 5 feet long, 95*s.* Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Drawers, 4 nests, 6 feet long each, containing 30 drawers in each nest, glass labels and glass knobs, 15*l.* 10*s.* the lot, or would be divided. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Glass bottles, job lines.—About 50 gross 3-oz. pale green wide-mouth rounds, 4*s.* 6*d.* per gross; 4 gross 6-oz. screw nickel-capped pomades, 16*s.*; 1 gross 16-oz. ditto, 30*s.*; 4 gross 2-oz. tinted vials, 3*s.* 9*d.*; 3 gross ½-pint (reputed) green syrups, 7*s.*; 4 gross ½-pint ditto, 10*s.*; 2 gross 1-pint ditto, 15*s.*; 1 gross 1-oz. green kalis, hurst off, 3*s.*; 1 gross 6-oz. flat sauces, stoppered, 10*s.*; 10 gross 3-oz. opal screw nickel-capped pomades, 20*s.*; 5 gross 1½-oz. ditto, 12*s.*; 5 gross ½-pint white syrups, 12*s.*; 3 gross 1-pint ditto, 20*s.*; 1 gross 6-drachm lavenders, 5*s.*; 4 gross ½-oz. oval essences, 4*s.*; 3 gross 2-oz. white globe-necked panels, 7*s.* Hearn, 381 Kingsland Road, London.

Miscellaneous.

Henry Laurence's spectacles, 60 per cent. discount, new. Griffith, Leamington.

Nearly new 5-grain pill-machine, "Selecta è Præscriptis"; what offers? Doubleday, Dorking.

½ doz. each 2*s.* 6*d.* and 5*s.* Anti-Rheumatic Towel Company's towels, for 25*s.* cash. Kemp, Chemist, Chester.

One cwt. each black, red, green, white, and stone Woolfall's liquid paints; what offers? Bayley, Chemist, Walsall.

Mixing machine (Pfeiderer's), gun metal, 2 to 4 lb. pill mass; cost 8*l.* 8*s.*; cash 5*l.* 80/40.

10 lbs. pot. iodidi opt., 10*s.* lb., carriage paid; 10 oz. otto rosæ virg., 21*s.* 6*d.* oz.; cash with order. J. N. Cutts, Chemist, Morecambe.

Petroleum jelly, best quality; a few 6-lb. tins for sale, 7*s.* 6*d.* per tin, carriage paid. R. Whitchurch, 43 Prince's Square, Kennington.

Outside globe lamp, cast-iron swan neck bracket, glazed ruby and green, 3 lenses, handsome gilt enrichments. Bond, Winchmore Hill.

Ten boxes choice 1884 La Amora de Cuba Havana cigars, cost 34*s.*, price 21*s.*; also choice cigars 12*s.* 6*d.* per 100, cost 22*s.* Slater, Beeston Hill, Leeds.

Bargain.—Lemon and orange oils, by-products from the fresh peels; capital perfumes for hair oils, pomades, &c.; 4*s.* per gallon. Hay, Chemist, Hull.

Kelly's "Chemists' Directory," 1889, just issued, 21*s.*; Goodall's grinding-machine, 9*l.* 9*s.*; large bell metal mortar; Sykes' 6*l.* 6*s.* hydrometer; offers. "Chemist," Yalding, Kent.

Water bed, in perfect condition, good as new, 60 by 36, for 3*l.*; also air bed and pillow, 72 by 36, with bellows complete, for 25*s.*, in perfect condition. Beyden, Chemist, Pocklington.

Thousands of gorgeous polarising, brilliant, opaque, and other entertaining microscope slides, for exhibition or study, 5*s.* dozen, approval; natural history books wanted in exchange; all who possess microscopes, at home or in distant lands, are invited to write; ridiculously cheap foreign parcel-post rates. Henry Ebbage, 344 Caledonian Road, London.

WANTED.

A good second-hand wall case. Jones, Chemist, Holywell.

Good second-hand capsuling-machine. Proctor, Arcade, Sunderland.

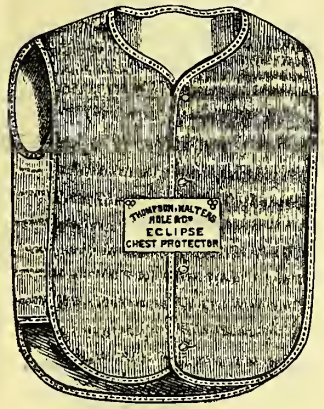
Mahogany-fronted wall case, 8 feet 6 in. or thereabouts, as Maw's fig. A 86. "Bitters," Treherbert.

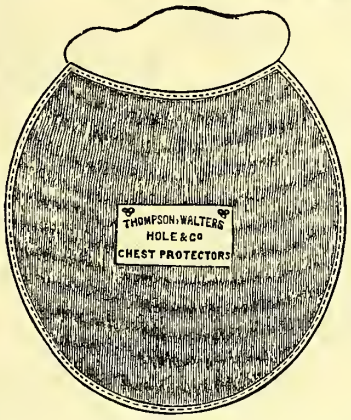
Counter front glass case, 6 feet to 6 feet 9 in. long, 2 feet 9 or 10 in. high, 6 or 7 in. deep; shelves wood or glass. Armitage, Chemist, Thorne, Yorks.

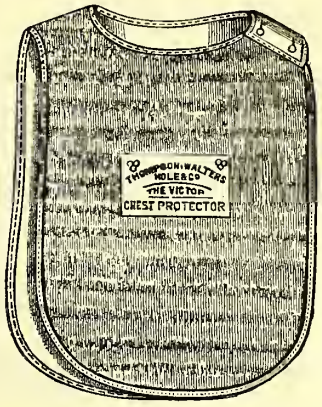
Muter's "Analysis," Otto Thomé on "Botany," Aveling's "Botanical Tables," Whitla's "Materia Medica"; last editions of each. Mason, Chemist, South Fulham.

Squire's "Companion," Wills' "Materia Medica," Bentley's "Botany (Structural)," Attfield's "Chemistry," Ince's "Latin Grammar of Pharmacy"; state price. J. C. Hardman, 113 Burley Road, Leeds.

CHEST PROTECTORS.







SCARLET OR WHITE FELT.

	No. 1	2	3	4	5	6
The "ECLIPSE" (new vest-shape pattern) per doz.	17/6	23/6	31/6	39/	48/	56/

	BEST. No. 0	1	2	3	4	5	6	SECOND. 0	1	2	3	4	5	6
DOUBLE, per doz.	14/	16/6	21/6	26/6	32/	43/	53/	11/6	14/	18/	22/	26/6	35/	44/
SINGLE, "	5/9	7/4	9/3	10/9	13/6	19/6	26/	5/	6/3	7/8	9/	11/6	15/	20/

CHAMOIS AND FLANNEL.

	No. 0	1	2	3	4	5
SINGLE, per doz.	5/3	8/2	11/	12/10	15/3	19/

	No. 1	2	3	4	5
DOUBLE, per doz.	19/	23/9	29/6	36/	46/

All the above Quotations are subject to 5 per cent. Discount. *Special Discounts for Quantity.*

N.B.—We also present with all Orders of £5 and upwards a HANDSOME WOODEN SHOW CASE WITH GLASS TOP LID TO LIFT OFF, which is equal in value to another 5 per cent. discount.

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Mahogany Glass Show Cases presented with First Orders of not less than £2 assorted.

THOMPSON, WALTERS, HOLE & CO.'S NON-CORRODIBLE METALLIC (OVAL) VELVET PAD—

Retail each,	1/	—per dozen,	7/6	Retail each,	2/6	—per dozen,	19/	Retail each,	5/	—per dozen,	42/
"	1/6	"	11/6	"	3/	"	22/	"	6/	"	47/
"	2/	"	13/3	"	3/6	"	28/	"	7/	"	53/

Thompson, Walters, Hole & Co.'s Cork, for retailing at 1/ each ..... per dozen, 6/
Coghill's Nickel-plated ..... " 15/
"Perfection," Metallic Gauze Plate, permanently medicated, Celluloid ..... " 16/

These Quotations are subject to 5 per cent. Discount. *Special Discounts for Quantity.*

THOMPSON, WALTERS, HOLE & CO., LIMITED,

CURTAIN ROAD, LONDON, E.C.

THE LONDON HOMŒOPATHIC HOSPITAL AND MEDICAL SCHOOL,

GREAT ORMOND STREET.

A NEW WARD, unoccupied for want of funds, is much needed for Male Patients, and will be opened so soon as sufficient funds to support it are received. The Hospital now contains eighty beds. Trained Nurses are sent out at moderate fees for Medical, Surgical, or Accouchement cases, the latter specially Certified.

A. CROSS, Secretary.

FIRST-CLASS

MEDICATED & TOILET SOAPS

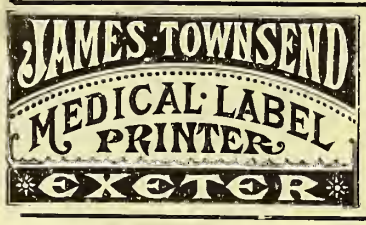
MADE BY

P. GELSTON & CO.

Manufacturing Chemists, 31 China Lane, Manchester

These Soaps sell readily, and give great satisfaction. Prices and Samples on application.

PREPARED SUET of the Finest Quality, for Pomades, Cold Cream, &c., 8d. per lb.; 14 lbs., 7d.



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High-class Artistic

HANDBILLS

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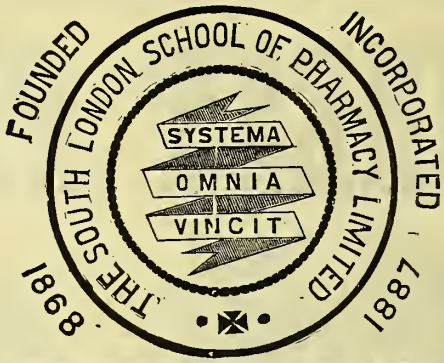
Before ordering apply to us for SAMPLES. Chemists selling Seeds should send to us for SAMPLES of our STOCK SEED CATALOGUES. Do not forget to ask for our NEW MINIATURE SEED LIST—most compact and useful. *Catalogues ready first week in November.*

BLAKE & MACKENZIE, Medical Label & General Printers, SCHOOL LANE, LIVERPOOL.



325 KENNINGTON ROAD, S.E.

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DR. MUTER, F.R.S.E., F.I.C., F.C.S.

Materia Medica and Pharmacy,
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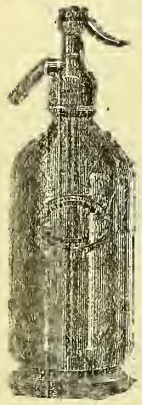

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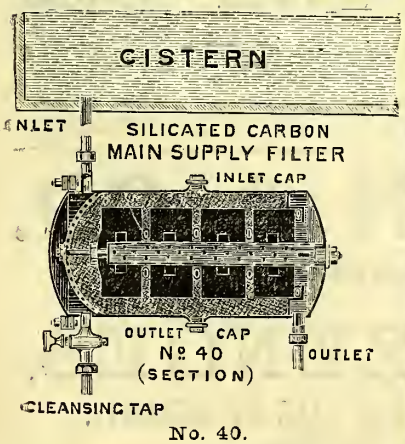

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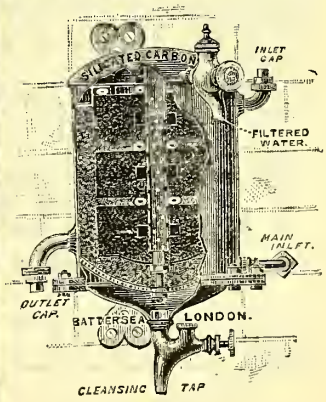

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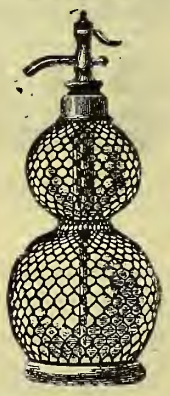

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DURHAM.—Old-established Retail and Dispensing; returns £700; price £500; good house, low rent, long lease; unopposed.

LONDON, S.—Main thoroughfare; Retail and Dispensing; returns £800; price £700; splendid chance for a pushing man.

LONDON, W.—Good-class Dispensing; returns £800; net profit after all expenses are paid £278; price £650.

LONDON (Near).—Good Family and Dispensing trade; returns £700; price £550; large and convenient house with private entrance.

Valuations for Probate or Transfer conducted in any part of the United Kingdom. Terms on application.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

HAMPSHIRE.—For disposal, a genuine Drug Business; unusual opportunity for Dentist. All particulars from "Chemist," Baiss Brothers & Co., 16 Jewry Street, London, E.C. No agents.

AN unopposed Business in a country town; steady trade at good profits; returns £900; rent £30; moderate-sized house, garden, &c.; price £450. R. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR immediate disposal, a select Retail and Dispensing Business, well situated in an improving watering-place on the East Coast. For terms and particulars apply to Grimwade, Ridley & Co., Wholesale Druggists, Ipswich.

NORWICH.—To be sold immediately, a genuine old-established Retail Business; good house, advantageous situation, rent moderate; satisfactory reasons for disposal. For particulars apply to Smith & Sons, 44, 46 & 48 Magdalen Street, Norwich.

SOMERSET.—Market town, population 10,000; very old-established Business, returning £650; plenty of scope for increase; price £500, or offer; every investigation; good introduction. Address, 66/15, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO Chemists and Dentists.—An old-established Chemist's Business in the centre of a market town in Wiltshire; a fine opportunity for a Dentist; large convenient house, warehouses, cellar, &c.; large garden, well stocked; rent £50. For further particulars apply to Messrs. Lynch, Aldersgate Street.

FOR DISPOSAL, on account of ill-health, a Mixed Drug and Ironmongery Business; no previous knowledge of the latter required; no patents; good profits; ready money; plenty of scope for increase; stock and fixtures at valuation only required; low rent. G. Hulme, Chemist and Ironmonger, Fenton, Staffordshire.

£150 CASH will purchase possession of old-established Light Retail, in good-class country town; population over 7,000; balance of £100 purchase-money by easy instalments; proprietor offers the above great sacrifice on cost to effect early sale; good shop; low rent. "Proprietor," 42 Castle Street, Shrewsbury.

£350.—Monmouthshire Iron and Coal district; established 30 years; proprietor retiring; genuine Prescribing, Dispensing, and General Retail Business; ready-money; full prices; shop large and convenient, nicely-fitted and well-stocked; rent £26. Apply, "Iron," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MR. SYDNEY GREENWOOD,

TRANSFER AGENT, VALUER & ACCOUNTANT,

PITTVILLE HOUSE, Lea Bridge Rd., CLAPTON, N.E.

LONDON, W.—Returns £400; good residential locality; 13-roomed house; rent £84; let off £75; valuable lease; valuation.

LONDON, E.C.—Returns £650; rent £40; valuable lease for 21 years; well-fitted, spacious premises; price £1,000; cash £600.

LONDON, N.—Returns £300, Minor, has done £600; low rent; good house, private entrance, garden; £170 to effect sale.

SUBURBS.—Returns £480; net profit £300; post office pays £50; low rent; good house and garden; brisk trade; price £450 or offer.

STAFFS.—Returns £1,000; profitable mixed cash trade; rent £40; noble-looking house; well fitted and stocked; price £750; a bargain.

LINCS.—Returns £500, formerly £900; rent £50; price £250. Another, returns £1,000; low rent; profitable family trade; price £800.

LIVERPOOL.—Returns £600, capable of increase; rent £40; good selling specialities, full prices; residential locality; price £420, part remain.

BERKS.—Returns £430; rent £45; Dispensing and Prescribing trade at full prices; good house; genteel locality; £315 to purchase.

HANTS, near seaside.—Returns £500; low rent; Prescribing trade; good profits; selling through infirmity; price £400; a bargain.

Others on application to Mr. Sydney Greenwood, as above.

BUSINESSES FOR DISPOSAL—Continued.

£400.—Chemist's Business, in pleasant country town, 25 miles N.W. of London; returning nearly £700; capital house and premises, low rent, every convenience for doing larger business; satisfactory reasons for selling; cash required £400, about value of stock and fixtures. A. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

BIRMINGHAM.—Central position in first-class and important suburb; Family Retail and Dispensing Business; large superior shop, with commanding frontage; elegant mahogany fittings throughout; well stocked; good opportunity for energetic man; capable of vast extension; price about £500. Address, J. O., care of Southall Brothers & Barclay, Birmingham.

£1,450 Returns.—In northern town, good mixed Retail, with excellent proprietaries and wines and spirits; one-third (nearly) of the returns are in the latter; will sell for valuation of stock and fixtures (abont £900), of which £400 can remain on security as sufficient guarantee of the bona fides of this business. "Tinct," care of Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

NO Stores, Midland country town; small good-class Business; good prices, handsome fittings, and well stocked: good house; capable of great development, especially by a man capable of taking up Dentistry, or prepared to do a pushing trade: never offered before: valuation terms (about £350). "Naphthol," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO Chemists, &c.—For disposal, an old-established Family Chemist and Druggist's Business in Lincolnshire; well stocked and furnished shop; returns about £1,000; good dwelling-house, also warehouse accommodation; freehold for sale or lease; goodwill, &c., £150; stock and fixtures at valuation. Apply, F. F., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£1,000 RETURNS.—In consequence of serious illness, a good-class Retail, Dispensing, and Prescribing with Wine Agency, and also an appointment worth £60 per annum; ill-health has prevented owner giving as much personal attention as desired, but an energetic man would find ample scope for increase; price £500 or valuation of stock and fixtures. "Syr," care of Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

EASTERN COUNTIES.—An old-established Family Retail and Agricultural Business, with small Stationery, situate in the leading position of a pleasant market town surrounded by an important and populous agricultural district, where a large and lucrative trade has been carried on over 50 years; this is a genuine concern, open to the fullest investigation, and a splendid opportunity for a young and energetic man wishing to establish a large trade on the General Store principle; average returns last 5 years over £1,000 and an agency worth £25 per annum; cash required about £800; large shop and house, outhouses, and very commodious warehouses; rent £55. "Hemys," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESSES WANTED.

A SMALL genuine Business, capable of enlargement, in a market town, Devonshire preferred; no agents. Address full particulars to "Druggist," 19 South Street, South Molton.

WANTED at once, a reliable Business, showing net profit £200 to £300; town or country; must be open to every investigation; trial preferred; comfortable house; no agents. Full particulars and cash price to "Chemist," 18 Park Street, Hull.

TO LET.

FIRST-RATE opening for a Chemist; good Shop, with plate-glass front, to be let; rent moderate. Apply at 132 High Street, Homerton; or at 16 Silk Street, Cripplegate, E.C.

SHOP to be let in main road; good opening for chemist; house contains double-fronted shop, shop-parlour, sitting-room, 3 bedrooms, yard with back entrance; rent £40. Apply to E. C. Ackermann, House Agent, Wimbledon.

SALE BY AUCTION.

LINCOLNSHIRE.—To be SOLD BY AUCTION, by Mr. W. Hemsley, of Tunbridge Wells, at the "White Hart," Spilsby, on Monday, the 23rd day of September, at 3 o'clock in the afternoon precisely, the valuable LEASEHOLD PROPERTY, consisting of Chemist's Shop (double-fronted, plate-glass), 3 sitting-rooms, 10 bedrooms, 2 kitchens, pantries and cellars and all conveniences, 10 warehouses and garden at back; the whole covering about 8,338 square feet; the above is situated in the best position of Market Square, opposite the Town Hall and Corn Exchange, and has been for over 50 years established as a Chemist's business. For further information apply to A. C. Farmer, Chemist, Southborough, near Tunbridge Wells.

SALE BY TENDER.

F. J. BRETT is instructed by the owner to Sell by Tender the old-established Business of Mr. J. Parkinson (who is entering the Wholesale), 11 Cross Cheaping, Coventry; the trade is Family Retail and Dispensing, with excellent Proprietary articles at more than the average profit; the shop is a prominent corner, 24 feet by 21, well-fitted and stocked; in busy thoroughfare and in good working order; the house is large and commodious, and held on long lease; to an enterprising man this presents an opportunity seldom occurring of securing a really good-class connection, with plenty of scope for increase, on exceptional terms. Tenders will be opened by F. J. Brett at Coventry, on Thursday, September 12, at 4 P.M., unless previously sold. Tender forms and all particulars can be had of F. J. Brett, Valuer, 60 St. Stephen's Road, Leicester.

PARTNERSHIP.

PARTNERSHIP wanted by a thorough business man; thorough knowledge of the Chemist's and Dental Profession. Address, "Partner," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, at once, Improver or Junior as third assistant. Apply personally, F. W. Warren & Co., 340 Harrow Road, London, W.

JUNIOR or Improver, with knowledge of Postal work preferred; Churchman; enclose photo if convenient, with usual particulars. Watson, Chemist, Caistor, Lincs.

WANTED, Man with good knowledge of Drugs, to keep stock, and assist at counter when required; state age, height, salary required, &c. Wand's Drug Stores, Leicester.

WANTED immediately, an Improver for a Mixed business. Apply, stating age, height, reference, salary required (indoors), and enclose photo, to A. N. Kershaw, Chemist, Keighley.

BOURNEMOUTH.—Assistant wanted (indoors). State age, height, salary required, references, and enclose photo to W. D., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, Manager, not under 26, for Family and Dispensing Business; must have experience in extracting teeth; first-class references. Address, A. Moore, 6 Castle Street, Hastings.

INDIA.—Chemist's Assistant who has passed the Minor Examination required for India; four years' agreement. Address for terms, and stating references, to R. C. A., Deacon's Advertising Offices, Leadenhall Street, E.C.

JUNIOR Assistant or Improver wanted at once; used to country business. Apply, stating full particulars of previous experience, age, height, references, &c., and enclosing carte, to Smart, Pharmaceutical Chemist, Steyning.

WANTED for 4th of October next, a thoroughly reliable Assistant capable of taking entire charge; must be well recommended; salary £30, indoors; would suit one requiring time for study. Apply Dadson, Broadway, Manor Park, E.

AS Junior, one just out of his time preferred, who can be well recommended, and has been used to good country trade; salary £20; comfortable home; send carte, to be returned, and state usual particulars. Johnson Cripps, Reepham, Norwich.

CHEMIST and Dentist's Assistant, with view to management of Branch; accustomed to good-class trade, and preference given to one well up in Mechanical Dentistry; within a month or more. "Surrey," Hearon, 5 Coleman Street, London, E.C.

JUNIOR ASSISTANT, about 20, wanted; must be able to dispense and have good address at counter; salary £25; no Sunday duty; enclose carte (to be returned) and say age, height, and references. C. F. Smart, 52 High Street, Littlehampton.

A QUALIFIED Married Man, who would accept free rental of four rooms, in return for a little daily help and care of premises; pleasantly situated in London suburb. Address, "Mutual," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR Assistant; indoors; for a few months in a country town; aged about 21; must have had some experience in dispensing and be well recommended. Apply, stating age, height, references, and salary required, and enclose carte, to W. P. Forth, Ashford, Kent.

MADRAS.—Chemist's Assistant wanted; Minor qualification; salary 100 rupees per month first year, annual advance 25 rupees per month, free board and lodging; engagement 3-5 years; second-class passage paid. Address, "Madras," care of Burgoyne & Co., 16 Coleman Street, London, E.C.

IMMEDIATELY.—An Improver or Junior for a Light Retail, Prescribing, and Dispensing Business; comfortable home. State age, height, salary required, reference, and enclosing photo, to Frederick James Lea, Dispensing Chemist and Dentist (by Exam.), The Folkestone Pharmacy, Tontine Street, Folkestone.

IMMEDIATELY, for pushing Retail and Dispensing, a quick and accurate Dispenser and good Counterman; abstainer preferred; hours 9 A.M. till 7 P.M., except Saturdays; no Sunday duty. Apply, with full particulars of age, salary required (outdoors), experience, with references, to Francis Spite & Co., Limited, St. Enoch Square, Glasgow.

WANTED, for a large Retail Drug business, a qualified Assistant, able to dispense, prescribe, and extract teeth; must be active and thoroughly obliging to customers; very liberal terms will be given to a good man. Apply by letter, enclosing references and photo, stating salary required, O. T., care of Raimes & Co., Wholesale Druggists, York.

BRADFORD INFIRMARY.—Wanted, Dispenser, non-resident (previous experience of hospital work preferred); fully qualified and possessing a good knowledge of his business; age not to exceed 35; salary £80 per annum, with prospective advancement. Applications, with certificates and copies of not less than three testimonials of recent date, as to moral character and ability, must be addressed to the undersigned on or before Wednesday, September 11 next.

Bradford, August 20, 1889. WILLIAM MAW, Secretary.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

ASSISTANT; qualified; London preferred. Lewis, 21 Landor Road, Stockwell.

TO Surgeons.—Part time; engaged from 2 till 6. "Dispenser," 26 Margaret Street, W.

LIGHT Porter or place of trust; aged 23; good character. F. P., 5 Bentham Road, Hackney, E.

DISPENSER; 9 years' experience; aged 25; married. Rowland, 19 Prideaux Road, Stockwell.

MANAGER (27), Locum-Tenens, or otherwise. "Medicus," 31 Bedford Place, Bloomsbury Square.

ASSISTANT; disengaged; good references. "Pharm.," 37 Clifford Street, Oxford Street, Manchester.

JUNIOR; outdoors; London preferred; 3½ years' experience; aged 19½. H. F. G., 19 High Street, Bedford.

MANAGER or Senior; disengaged middle September; good references. "Qualified," Medical Hall, Llandudno.

MIXED Country Trade; 8 years' reference from last place; aged 32. P., 5 Filey Cottages, Portland Road, Nottingham.

ASSISTANT; outdoors; aged 24; Minor qualification; good references. "Chemicus," Mills & Baxter, Bourne, Lincs.

JUNIOR in good-class Dispensing Business; aged 19½; abstainer; good references. G. L. Pullan, Leeds Road, Harrogate.

BRANCH or Assistant; outdoors; Mixed Retail; 12 years' experience; good references. "Alpha," 7 Market Street, Gainsborough.

ASSISTANT or Manage Branch; aged 31; single; unqualified; indoors and permanency preferred. Lumbus, Aston, Nantwich.

AS Junior; 5 years' experience; teeth extractor; first-class references. Apply, T. G. Hanks, Maugersbury, Stow-on-the-Wold.

ASSISTANT, aged 39; height 5 ft. 8 in.; disengaged; Minor qualification; unmarried. "Chemist," 266 Albany Road, Camberwell.

ADVERTISER wants Dispensing experience; small salary; 5 years' experience; 24; tall; abstainer. A. Lemmon, Waterfoot, Rossendale, Lancs.

DISPENSER (outdoors); thoroughly steady habits; excellent references; aged 26; disengaged. "Alpha," 57 Tunis Road, Shepherd's Bush, W.

MANAGER or Temporary; disengaged; aged 42; good Extractor and Prescriber; references. "Beta," 36 Bulwer Street, Shepherd's Bush, W.

LONDON.—Junior in good-class business; 21; nearly 5 years' town and country experience. "Amandin," Langdon's, V.S., Camelford, Cornwall.

SENIOR, Branch, or Surgeon's Dispensing; 20 years' varied experience; disengaged. Orton, care of Mr. Kirkland, North Street, Leatherhead.

TEMPORARY.—14 years' London and country experience; disengaged in a few days. "Imric," Smith, Chemist, Broad Street, Birmingham.

AS Assistant; aged 23; 7½ years' experience, good-class Retail and Dispensing; highest references. F. Marton, Normanby, Kirby Moorside, York.

ASSISTANT; aged 26; 12 years' experience; good references; last 5 years in Stores; Wholesale or Retail. H. H., 26 Montgomery Street, Edinboro'.

AS Assistant; aged 24; Minor qualification; country and West-end experience; good references. Apply, "Statim," Golden Grove, Carmarthenshire.

DISPENSER, Surgeon, Hospital, Dispensary; experienced, qualified, reliable; whole or part time; terms moderate. Hunt, Chemist, The Plain, Wandsworth.

ASSISTANT, Wholesale or Retail, or Branch Manager; aged 25; tall; Prescribe and Extract; married; disengaged. H., 39 Crown Terrace, Richmond.

WHOLESALE (London), as Traveller or Warehouseman; 10 years' practical experience (London); good references, &c. "Rhei," 19 Bark Place, Bayswater.

AS Assistant or Manager to a Chemist; married; thorough knowledge of the Dental profession. Address, "Dentist," care of Mrs. Shelvey, High Street, Minster, Thanet.

MR. S. SMITH, 6 Shaftesbury Terrace, Ashley Road, Bristol, takes Confidential Management during absence or illness, or Branch; varied experience; disengaged for October.

MANAGER, Branch or small business, with view to eventual succession; married; Manchester or Liverpool preferred. "Alpha," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LOCUM-TENENS; in Yorkshire; week or month; 8 years' experience; General, Mixed Retail, Dispensing, Prescribing; 7 years in Wholesale. "Chemicus," 2 Albert Villas, Boulevard, Hull.

MEDICAL.—Wanted, by a Gentleman of mature age and experience, an Outdoor Appointment, to conduct a Branch or otherwise; character and references. "Medicus," 54 Sefton Street, Southport.

IMPROVER seeks engagement; aged 19; seven months' experience; knowledge of both Homœopathic and Allopathic treatment; no salary required first six months. T. Howells, Aubrey Terrace, Cowbridge.

AS Junior Assistant in a good-class Retail and Dispensing Business, where one or two are kept; aged 20; height 5 feet 9½ inches; disengaged September 24. C. A. Neale, 18 St. Andrew's Street, Cambridge.

WHOLESALE.—Wet or Dry Counter; 15 years' experience in one London Drug House; reference unexceptionable; willing to go abroad. 77/37, Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

ADVERTISER has had 3 years' experience in the business, and is anxious to get into a good Pharmacy where first-class dispensing business is done. W. Shepperson, Merton Lodge, Denmark Hill, London, S.W.

MANAGER; aged 34; qualified (married, no family); experienced surgeon dentist; unimpeachable character; disengaged after September 20. Address, "Radix," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ANALYTICAL Chemist (34), experienced Food, Drug, General Analysis, Pharmaceutical and Chemical author, desires engagement in Wholesale Drug or other house; excellent testimonials; experienced in management; practical British wine maker. Care R. D., Woodford House, Santry, Dublin.

IMMEDIATE, an Assistant, about 30; indoor; good prescriber and dispenser. Address, 193 Brixton Road, S.W.

A YOUNG gentleman, knowing English, French, and German, seeks a situation in a Wholesale Export Drug house; small salary to commence with; excellent references. Address, M. B. C., 68, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

APPRENTICESHIP.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

DENTAL PUPIL.—An old-established and experienced Dentist in the North of London has a vacancy for a Pupil; premium moderate. Address, Mr. Balding, Cheddon House, 525 Upper Holloway Road, N.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

SHOP FITTINGS.—The entire fittings of Chemist's shop, including 30 dozen gold-labelled bottles, upright and flat glass cases, counters, 2 specie jars, gas stoves, drawers, drug boxes, &c. Coles, Chemist, Worcester.

ENTIRE fittings of handsome Pharmacy, as good as new, with recess bottles; also small stock; these offers are worthy the attention of those commencing business or branches, and are cheap for prompt cash. 82/8, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR SALE, Druggist's Fixtures.—Bottles with Silverlock's labels; 113 drawers, solid mahogany, of first-class make; excellent upright counter case; fittings painted mahogany; will sell in lump sum or valuation; no reasonable offer refused, as giving up business. Address, Alfred Johnson, Spofforth, Wetherby, Yorkshire.

THE STOCK, Fittings, and Fixtures of an old-established Chemist, suited for a Chemist starting business or opening branch, including fair stock of drugs, good proprietary recipes, quantity of gold-labelled shop bottles, show carboys, glass cases, &c.; no patents; cash £55. Apply, Humby, 40 East Street, Southampton.

TO STUDENTS.—Partial board and residence, with assistance in studies, 15*s.* weekly, inclusive; full board on Sundays; pleasant, healthy suburb; a home from home; penny tram to Wills' or Muter's; references to past students; Minor and Major. "Pharmacist," 52 Ivanhoe Road, Denmark Park, S.E.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1*s.* How to Write an Essay, 3*d.* Cæsar Simplified, 1*s.* Knotty Points in Latin Grammar, 1*s.* 6*d.* MINOR.—Equations Simplified, 1*s.* Illegible Autographic Prescriptions, 1*s.* Notes on Dispensing, 1*s.* Prescriptions given at the Minor, 6*d.* "Chemist," care of Mr. J. Edwards, Wye, Kent.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

Printed by SPOTTISWOODE & CO., New-street Square; and Published at the Office, 42 Cannon Street, in the City of London.—*Sept.* 7, 1889.

ROBINSON'S
LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various **Beef Wines** I have had occasion to examine, none have **equalled** as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to **Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.**

WILLIAM ELBORNE, F.C.S., F.L.S.,
Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).
December 15, 1888.

Introduced 1855.] **ROBINSON'S CONCENTRATED WATERS.** [Introduced 1855.

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopœia, and free from all Chemical impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent.,	4/ lb.	Aqua Cinnam. Ver. Concent.,	6/ lb.	Aqua Fœniculi, Concent.,	4/ lb.	Aqua Pimentæ, Concent.,	4/ lb
„ Anisi „	4/ „	„ Cassiæ „	4/ „	„ Menth. Pip. „	4/ „	„ Rosæ „	8/6 „
„ Camphoræ „	4/ „	„ Flor. Aurant. „	8/6 „	„ „ Ang. „	6/ „	„ Rosæ Virgin „	10/6 „
„ Carui „	4/ „	„ Flor. Sambuci „	8/6 „	„ „ Virid. „	4/ „		

The above are put up in Bottles of ½ lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, *July* 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Aniei, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopœia. They are *excellent in quality*, and will be very useful, especially in country practice. [1]

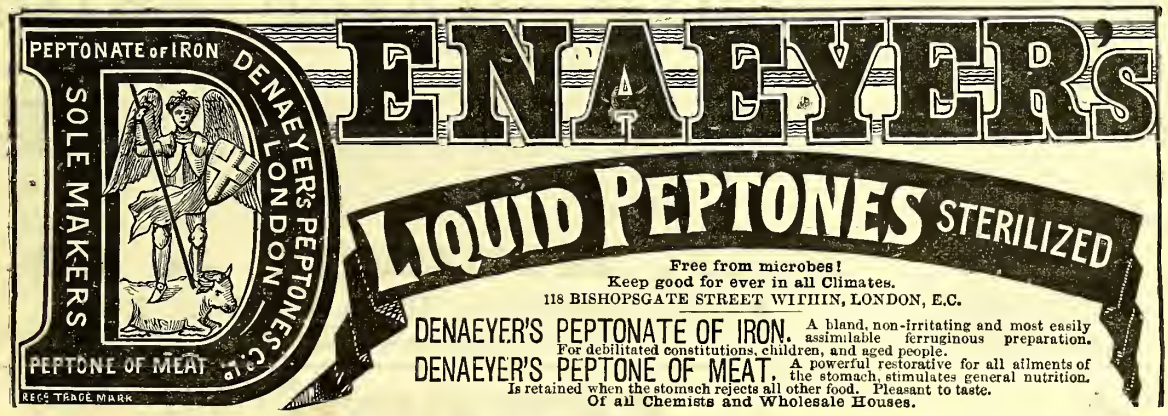
Wholesale Agents: HEARON & CO., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR.
B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.

ROWNTREE'S

The "MEDICAL PRESS AND CIRCULAR":—
"Certainly this preparation is of **delicate flavour** . . . It is perfectly soluble . . . the **small quantity required** for the *immediate* production of a cup of excellent cocoa will ensure for this '**Elect Extract**' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee.

The "BRITISH MEDICAL JOURNAL" says:—
"**Rowntree's Cocoa Extract** is one of the best. Its **flavour** and **aroma** are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND.



Free from microbes!
Keep good for ever in all Climates.
118 BISHOPSGATE STREET WITHIN, LONDON, E.C.

DENAEYER'S PEPTONATE OF IRON. A bland, non-irritating and most easily assimilable ferruginous preparation. For debilitated constitutions, children, and aged people.
DENAEYER'S PEPTONE OF MEAT. A powerful restorative for all ailments of the stomach, stimulates general nutrition. Is retained when the stomach rejects all other food. Pleasant to taste.
Of all Chemists and Wholesale Houses.

"RAMORNIE." LIEBIG'S Extract of Meat.

As supplied to the War and India Offices.

1-lb. Jars	per lb. 6/2	per doz. 74/0		2-oz. Jars	per lb. 7/0	per doz. 10/6
½-lb. Jars	„ 6/4	„ 38/0		1-oz. Jars	„ 7/8	„ 5/9
¼-oz. Jars	„ 6/7	„ 19/9		½-oz. Jars	„ 8/0	„ 3/0

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.
Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C. 6 *lbs. Carriage Free.*

INDEX TO ADVERTISEMENTS, see Pages 21-23.

MAY, ROBERTS & CO.,

9 CLERKENWELL ROAD, LONDON, E.C.

TELEGRAPHIC ADDRESS—"FEEDING BOTTLES LONDON."

ILLUSTRATED CATALOGUE, 1889,

DRUGGISTS' SUNDRIES, SURGICAL APPLIANCES, PATENT MEDICINES, ETC., NOW READY.

POST FREE ON APPLICATION.

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE

GENUINE

DR. JOHN HOOPER'S PILLS,

Which may be known by the Name of the Inventor, engraved in white letters, being on the Government Stamp.

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AMERICAN BUYERS are particularly Cautioned ! !

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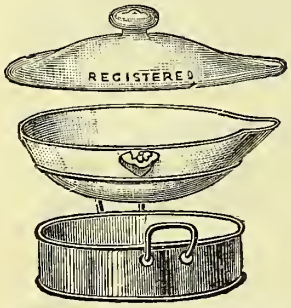
REGISTERED.



This Water Bath will supply a long-felt want amongst Chemists and Perfumers, where small quantities of materials have to be dealt with.

The **old form** of Water Bath necessitates the use of **a second vessel** for pouring the melted **Pomade, Cream,** or other substance into the bottles or jars in which they are sold. In the **"MAY-ROBERTS" Water Bath** the earthenware bowl can be lifted out of the tin containing the boiling water, the process of cooling being thereby very much expedited, and the contents can be **poured** into the bottles or jars **direct from the bowl.** The Bath is also supplied with an earthenware cover.

	1 PINT.	5 PINT.	10 PINT.	[1]
Each	3/0	5/6	9/6	

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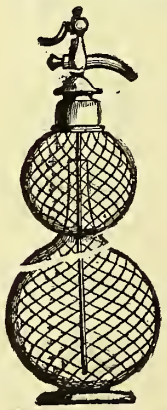
Telegraphic Address—"FEEDING BOTTLES LONDON."



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Caned, each	7/	8/	12/5	20/9
Wired, each	6/6	7/9	11/9	18/11

£2 worth or more, 5 per cent. discount.

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Barnett and Foster
Catley Abbey Mineral Water
Chemists' Aërated Waters Association.
Ellis (Ruthin)
Hassall and Co. (Citric Acid Phospho)
Hay, W.
Idris and Co.
Jewsbury and Brown
Kinmond and Co.
Mills and Co. (Bourne)
Schacht, W., & Co. (Kronenquelle)
Taylor, T. and F. J. [See GINGER ALE.]

DITTO PLANT
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Barnett and Foster
Bratby and Hinchliffe
Favarger, H.
Fevre, T.
Gueret Frères
Tyler, Hayward, and Co.

ACETIC ACID
Dunn and Co.
Greeff, R. W., and Co.
Morris and Callard (Salts)

ALKALOIDS
Howards and Sons (Cinchona)
Smith, T. and H.

AGNCIES ABROAD
Australian Drug Co.
Cocking and Co. (Japan)
Felton, Grimwade and Co. (Melbourne)
Fougera and Co. (New York)
Kempthorne, Prosser & Co. N.Z
Lennon, B. G., and Co.
Levy, Jules
Macnaughtan, F. J.
Peake, Allen and Co.
Petersen, P. J., and Co.
Prosser, Taylor and Co.
Rich, E. C., Co.
Roberts (Paris, &c.)
Rocke, Tompsitt and Co. (Melbourne)
Soul, W. H., and Co.

ALMANACKS
Townsend, J.

AMMONIA
May and Baker.
White, A., and Sons
Woolley, Sons and Co.

APPARATUS
Becker, F. E., and Co. (Scientific)
Clarke, S. (Food Warmer and Bed Tray)
French Nickel Manufacturing Co.
McHugh, B. and E. (Lemon Squeezer)
Orme (Scientific)
Perken, Son and Rayment
Stokes, J. R., and Co., (Lim.) (Check Till)
Wedgwood & Sons (Mortars)

BAKING POWDER
Dunn, W. G., and Co.
Goodall, Backhouse and Co

BANDAGES
Bailey, W. H., and Son
Robinson and Sons
Schutze, F., and Co.
Seabury and Johnson

BATH GLOVES
Maw, Son and Thompson, S.
Pattison, G.

BEESWAX
Bowdlear, W. H., and Co.
Luneberger Wax Bleaching Works

BICARB. SODA
Brunner, Mond and Co., Lim.
Gaskell, Deacon and Co.
Howards and Sons
May and Baker

BISMUTH. PREP.
Hearon, Squire and Francis
Hewlett and Sons
Howards and Sons
May and Baker
Symes and Co.
White, Alfred, and Sons

BLOOD MIXTURE
Lincoln and Midland Counties Drug Co.

BOOKS
Dr. Dobell
Gurney and Jackson
Hargreaves, Dr.
Pritchett, W. E.
Whitla, W., M.D.

BOTANIC BEER
Newball and Mason

BOTTLES
Aire and Calder Bottle Co. (Ltd.)
Bailey, M., and Co.
Barnett and Foster
Barrett, R. H.
Bratby and Hinchliffe
Breffit's (Lim.)
Evans, Sons and Co.
Fitch, W. B., and Co.
Hearn, E. A., and Co.
Hunt, W. F. (Caps)
Isaacs and Co.
Kilner Bros.
Lang, Jonas, and Co.
Lang, Jules, and Co.
Maw, Son and Thompson
Poths, H., and Co.
Sanders, H. G., and Son
Shirley, A. W.
Taylor, E., and Co.
Taylor, G., and Co. (Limited)
Toogood
Youldon, E.

BRUSHES
Dukas and Co.
Goad and Co. (Tooth)
Moseley, David, and Sons
Sutton, O., and Co. (Tooth)

BUTTER COLR, &c.
Oldfield, Pattinson and Co.
Tomlinson and Hayward

BOXES
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Ayrton and Saunders
Chalmers, W. B.
Noakes, B., and Co.
Owen, J., Jr
Parmenter, I. W. & Co. Lim
Robinson and Sons

CAMPHOR
Howards and Sons
Keene and Ashwell (Homœopathic
May and Baker

CAPSULES
Denoual, J. (Medicinal)
Duncan, Flockhart and Co.
Evans, Sons and Co.
Hooper, B., and Co.
Maw, S., Son and Thompson
Robertson, J., and Co.

CAPSULES (METALLIC)
Betts and Co.
Melin, C. (Macbine)
Sanders, H. G., and Son

CARMINE
Bush, W. J., and Co.

CSCRA SAGRADA
Duncan, Flockhart and Co.
Evans, Sons and Co.
Ferris and Co.
Moss, J., and Co.
Squire and Sons

CATALOGUE
Evans, Sons and Co.
Maw, Son and Thompson, S.
May, Roberts and Co.
Sanger and Son
Thompson, Walters, Hole and Co. (Limited)

CRSHD LINSEED
Mumford, G S

CEMENT
Foulkes, W. J.
Kay Bros., Lim.
Mumford, R.

CHALK PRECIP.
Dunn and Co.
Levermore, Aug., and Co.
White, A., and Sons.

CHEMICALS
Andreae, Oscar and Co.
Boehm, F.
Bramwell and Son
Brunner, Mond and Co., Lim.
Bush, W., Son and Co.
Dunn and Co.
Fletcher Fletcher and Stevenson
Fuerst Bros.
Gaskell, Deacon and Co. (Bicarbonate of Soda)
Goodall, Backhouse and Co.
Greeff and Co.
Hill, A. S., and Son
Howards and Son (Pharm.)
Kuhn, B.
Levermore, Ang., and Co.
Lofthouse and Saltmer
May and Baker
Morris and Callard
Moss and Co.
Pronk, Davis and Co.
Stern, G. and G. (Pumiline)
Smith, T. and H., and Co.
Typke and King
White, A., and Sons
Zimmermann, A. and M.

CHEST PROTCTRS
Bailey, W. H., and Son
Hockin, Wilson and Co.
Maw, Son & Thompson, S.
Sanger and Sons
Schutze, F., and Co.
Thompson, Walters, Hole and Co. (Limited)

CHLRIDE OF GOLD
Rowland, L.

CHL. OF POTASH
Burroughs, Wellcome and Co.
Hooper, B., and Co.

CHLRIDE OF LIME
Government Sanitary Co.
National Chemical Co.

CHLORODYNE
Davenport (Browne's)
Freeman, R.
Towle, A. P., and Son

CHLOROFORM, &c.
Duncan, Flockhart and Co.
Macfarlan, J. F., and Son
Smith, T. and H., and Co.
Wright, Layman and Umney
Zimmermann, A., and Son

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Hassalls (Phospho)

COCAINE-HYDRO.
Howards and Sons

COCA WINE
Armbrecht, Nelson and Co.
Evans, Sons and Co.
French Hygienic Soc.

COCOA & CHOCLTE
Cadbury Bros
Fry and Sons
Rowntree and Co.
Scheibler Bros. and Co.
Van Houten's Cocoa

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Allen and Hanburys
Brekke and Howlid
Burroughs, Wellcome and Co
Evans, Sons and Co.
Hill, A. S., and Son
Lofthouse and Saltmer
Oppenheimer Bros. and Co.
Smith, T. J.
Woolley, Sons and Co.
Wright, Layman and Umney

COFFEE
Symington and Co. (Coffee Essence)

COLPSIBLE TUBES
Betts and Co.
Brooks, Peel and Co.
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Blyton, T. Bage, and Co.
Burroughs, Wellcome and Co
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Leo and Co.
Wyleys and Co.

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Pascall, J.
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Solport Bros. (Plasters)
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Young, H.

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Seabury and Johnson

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Maw, Son and Thompson, S.
Newbery and Sons
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Sutton, O., and Co.
Thompson and Capper
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Schutze and Co.
Thompson, Walters, Hole and Co.
Toogood, W.

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Noakes and Co.

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Pronk, Davis and Co.

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Shirley, A. W.

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Allen and Hanburys

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Gent and Co.
Orme and Co.

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Clarkson and Co.
Elliman, Sons and Co.

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Ingram and Son
Lynch and Co.
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Sanger and Son
Schutze, F., and Co.

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Harris, A. J. (Glass)

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Stevenson and Howell
Symes and Co.
Treatt, R. C.
Warrick Brothers
Wright, Layman and Umney
Vogt, G.

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Beckett, W.
Boehm, F.
Bratby and Hinchliffe
Burgoyne, Burbidges and Co.
Bush, W. J., and Co.
Cummock, J
Duckworth and Co.
Goodall, Backhouse and Co.
Hay, W.
Idris and Co.
May and Baker
Oldfield, Pattinson and Co.
Southwell, C., and Co.
Stevenson and Howell
Tyrer, P. (Anchovies)
Woolley, Sons and Co.

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Duncan, Flockhart and Co. (Chloric)
Howards and Son
May and Baker
Robbins
White, A., and Sons
Woolley, Sons and Co.
Wright, Layman and Umney

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Allen and Hanburys
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Burgoyne, Burbidges and Co.
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Fletcher, Fletcher & Stevenson
Hearon, Squire and Francis
Hooper, B., & Co.
Moss and Co.
Oldfield, Pattison and Co.
Potter and Clarke
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Liebig Co.

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Hockin, Wilson and Co.
Kilner Bros.
Maw, Son and Thompson, S.
Marriot, E., and Co.
May, Roberts and Co.
Thompson, Walters, Hole and Co. (Limited)
Toogood, W.

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Tunbridge and Wright
Wilson & Co.

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Doulton and Co.
Mawson, Swan and Weddell
Silicated Carbon Filter Co.

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Benger's Pancreatised
Bovril (Limited)
Brand and Co.
Dahl's Dyspepsia Cakes
Goodall, Backhouse and Co.
Hearon, Squre (Malted)
Liebig Co.
Mottershead & Co. (Benger's Food)
Nestle, H.
Ridge, Dr.

FORMULÆ
Brooks, T.

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Kinmond and Co.
Mills, R. M., and Co.

GLYCERINE
Fink and Co.
Price's Candle Co.
Van Geelkerken and Co.

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Burroughs, Wellcome and Co.
Curtis and Co.
Evans, Sons and Co.
Hearon, Squire and Francis
Hill, A. S., and Son
Kerfoot, T.
Wright, Layman and Umney

GUM
Fink (Arabic, &c.)
Hyde, Nash and Co.
Knight and Co.
Levermore Aug., and Co.
Pronk, Davis and Co.

GUTTAPERCHA
Duncan, Flockhart and Co.

HAIR PREP.
Brodie, J. (Imperial Hair Dye)
Chesebrough Mnfg. Co.
Quelch, H. C.
Truefitt, H. P. (Limited)

HERB BEER EXTS
Newball and Mason
Oldfield, Pattinson and Co.
Potter and Clarke

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Newball and Mason (Extract of Herbs)
Potter and Clarke (Extract of Herbs)
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Butcher, W., and Co.
Epps, J., and Co.
Gould, E. and Son
Keene and Ashwell
Leath and Ross
Thompson and Capper
Watson and Wates

HOPS
Wilkinson, A., and Sons

HOP ALE ESSENCE
Hay, W.

HYPOPHOSPHITES
Duncan, Flockhart and Co.
Dunn and Co.
Fellows
Fletcher, Fletcher and Co.
Symes and Co.
Typke and King

HOSPITALS
Bolingbroke House
London Homœopathic

INHALERS
Anderson and Adams
Evans Sons and Co.
Godfrey and Cooke
Maw, Son and Thompson, S.
Toogood, W.

INSECTICIDES
Maw, Son and Thompson, S.
Sanford
Steiner and Co.
Vogt, G.

INK [See MARKING]
Bewley and Draper
Duncan, Flockhart and Co.

JELLIES (TABLE)
Southwell, C., and Co.

KETCHUP
Tyrer, P.

LAMPS
The Wenham Co. (Limited)

LARD
Ewen J.

LEECHES
Fitch and Nottingham
Potter and Clarke

LIME JUICE
Evans, Sons and Co.
Idris and Co.
Hockin, Wilson & Co.
Southwell, C., and Co.

LINT
Liverpool Lint Co.
Maw, Son and Thompson, S.
Newsome, C.
Robinson and Sons
Seabury and Johnson

LOZENGES
Allen and Hanburys
Blyton, T. Bage, and Co.
Gibson, R., and Sons (Manfrs.)
Hill and Son
Kerfoot, T.
Martindale, W.
Pascall, J.
Raimes and Co.
Warrick Bros.

MACHINERY
Burroughs, Wellcome and Co.
Carter, J. H.
Goodall, E. F.
Holroyd & Co. (Limited)
McFerran, J. A.
Melin, C. (Capsuling)
Pontifex and Wood
Werner and Pfleiderer

MAGNESIA
Andreae, Oscar, and Co.
Bush, W., Son and Co.
Butler, T. E., and Son (Citrate)
Dinneford
Henry, T. and W. (Calcined)
Hill and Sons, A. S.
Hockin, Wilson & Co. (Citrate)
Kerfoot, T. (Citrate)
Murray, Sir James, and Son
Southwell, C., & Co. (Citrate)

MALT EXTRCT, &c.
Burroughs, Wellcome and Co. (Kepler's)
Hearon, Squire and Francis
Oppenheimer Bros. and Co.

MARKING INKS
Barber, G., and Co. (Crimson)
Hickisson, J.

MEDICINE CHSTS
Day, Son and Hewitt (Veterinary)
Day and Sons (Veterinary)

MENTHOL
A 1 Menthol Depot, A. W. Shirley, Proprietor
Cocking and Co.
Hockin, Wilson and Co.
Maw, Son and Thompson, S.
Shirley, A. W.

MERCURIALS
Howards and Sons
May and Baker

METHYLATED SPIRITS
Burrough, J.
Harvey, J. & W., and Co.
Jones and Co.
Phillips, G., and Co.

METHYLENE
Robbins, J., and Co.

MICROSCOPES
Darton, F., and Co.
Perken, Son and Rayment

MILK
Nestle, H. (Condensed)
Swiss Milk Co.

MIXING MACHINERY
Bracher and Co.
Carter, J. H.
Werner and Pfleiderer

MORPHIA
Macfarlan, J. F., and Co.
Smith, T. and H.

MUSTARD
Johnson, J. H. and S. (Ess. Oil)

OILS, PAINTS, &c.
Anglo-American Oil Co. (Lim.)
Colthurst and Harding
Pronk, Davis and Co.

OPTICIANS
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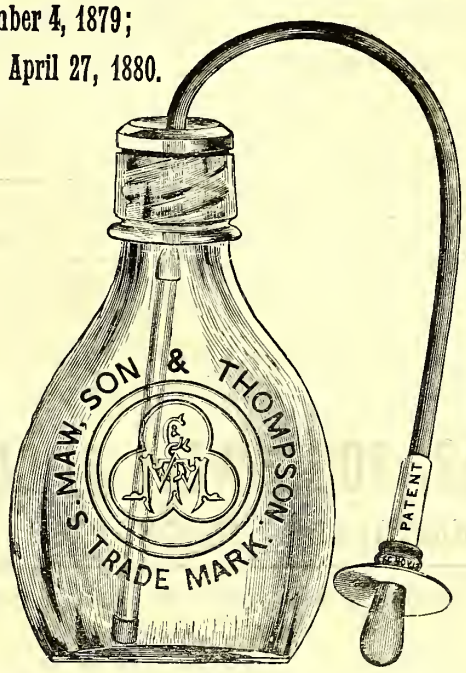

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FOR FURTHER PARTICULARS SEE QUARTERLY PRICE CURRENT, PAGES 65 AND 66.

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FRUIT SYRUPS.
4/6, 6/0, and 8/0 per dozen.

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The following are the principal contents of the July number:—

EDITORIAL NOTES.

The Centennial International Exhibition Medal—A "Person" in Tasmania (important decision under the Medical Act)—Friendly Societies in Victoria—Medical Practitioners on Counter Prescribing—The Pharmacy Board of Queensland—Antifebrin and Antipyrin—Strychnine in Snake-bite—The New Zealand Medical Bill—Rabbit Poison—Expiring Trade Marks—Ana or AA.

COLONIAL REPORTS.

New South Wales.—Board of Pharmacy (official report of Monthly Meeting)—Pharmaceutical Society (official report of Monthly Meeting)—Comments on various matters—Miscellaneous and Personal Information—Trade Changes.

New Zealand.—Pharmacy Board (report of Monthly Meeting)—Midland Pharmaceutical Association of New Zealand (official report of Special Meeting *re* Medical Bill)—Reports on pharmaceutical matters, &c., from Auckland, Christchurch, and Timaru—Trade Items.

Queensland.—Pharmacy Board (official reports of Special and Monthly Meetings)—Text of the first report of the Pharmacy Board of Queensland presented to both Houses of Parliament—Pharmaceutical Society (official report of Monthly Council Meeting)—The Editor in Brisbane.

South Australia.—Pharmaceutical Society (official reports of Monthly Council and General Meetings)—Miscellaneous Information and Trade Changes.

Tasmania.—Launceston Pharmaceutical Association (report of Special Meeting)—Full report of Important Case, "The Launceston Pharmaceutical Association *v.* Launceston United Friendly Societies' Dispensary"—Trade News.

Victoria.—Pharmacy Board and Pharmaceutical Society (reports of Monthly Meetings)—Friendly Societies in Victoria (report of case, "The Pharmacy Board of Victoria *v.* The Bendigo United Friendly Societies' Medical Institute and Dispensary")—General and Trade Notes.

Books Received—Correspondence—Patents applied for in all the Australasian Colonies.

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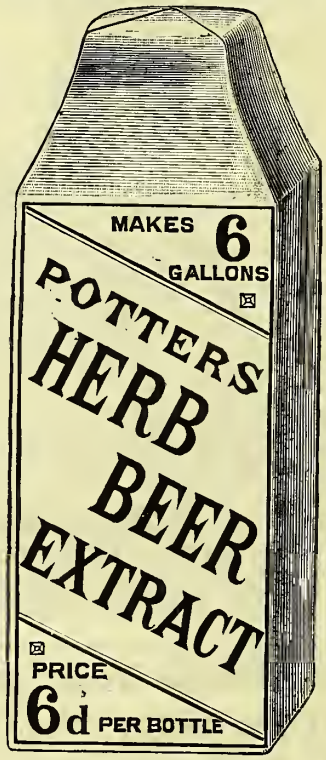

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Salol contains 60 per cent. salicylic acid and 40 per cent. phenol. It is tasteless, odourless, and insoluble in water. As Salol is not broken up by the gastric but by the pancreatic juice, it is not absorbed until it passes into the duodenum. It therefore seems indicated instead of the soluble preparations of salicyl in those cases where the stomach is irritable or a little weak. It is used as an antiseptic in intestinal troubles, cystitis, pyelitis, vaginitis, wounds, ulcers, and as an antipyretic.

Salol Tabloids supplied to the Trade in bottles of 25 and 100, at 12*s*. and 36*s*. per doz. Retail 1*s*. 6*d*. and 4*s* each.

SULPHONAL-BAYER TABLOIDS.

Sulphonal was discovered by Professor Baumann, of Freiburg University, and first prepared by Fiedrich Bayer & Co., Elberfeld, Germany. Its physiological and pathological effects were first ascertained by Prof. Kast, of Freiburg University, who discovered and studied the hypnotic action. Since then it has been the subject of numerous trials and experiments by many eminent and experienced physicians, whose testimony is unanimously favourable.

Sulphonal is not a narcotic like morphine, but acts by giving rest to the cells of the cerebral cortex, thereby causing sleep. The drug is best administered at bed-time in the form of Tabloids of Compressed Sulphonal, dissolved in hot fluids, *e.g.*, soup, tea, coffee, cocoa, &c., as when placed in the liquids they disintegrate and easily pass into the circulation.

On account of being tasteless Sulphonal presents a favourable advantage over other soporifics in the cases of weak-minded and insane patients, for "it can be easily administered without being detected."

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Sulphonal Bayer supplied to the Trade at 1*s*. 6*d*. per oz. (subject to fluctuation of the market).

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	Retail each.	Per doz.
In Crystal Glass Tubes, 25 in each...	/6	4/
" In Beautiful Crystal Glass Oval Bottles, with White Metal Caps, 100 in each...	1/	8/6
" Ditto, ditto, 200 in each	1/9	16/

ABOVE PRICES SUBJECT TO USUAL DISCOUNT.

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ANALYTICAL AND MANUFACTURING CHEMISTS,

WHOLESALE AND EXPORT DRUGGISTS.

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Chemicals Examined as to Purity and Strength before passed into Stock.

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SOL. PEPSIN c. EUONYMIN.—A biliary stimulant and digestive agent of pronounced efficacy.

CASCARA CORDIAL.—An agreeable and reliable laxative in habitual constipation.

INFANTS' FOOD, MALTED. EXTRACT OF MALT IN VACUO.

LIQUID BUTTER COLOURING.

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5 COLEMAN ST., LONDON.

THE CHEMIST AND DRUGGIST

ESTABLISHED 1859.

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The Pharmaceutical Society of New South Wales.

The Midland Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

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ADVERTISEMENTS of situations vacant and wanted, businesses for disposal, &c., will be received by us up till the first post on Friday morning.

MR. HARRY V. DAKERS, our agent for the United States, has removed his office from Liberty Street to 24 Union Square, New York.

SUBSCRIBERS' ADDRESSES.—In order to ensure uninterrupted delivery of THE CHEMIST AND DRUGGIST to subscribers who may be changing their address, notice of such change should be received by the Publisher not later than *Monday* of the week in which the journal is to be sent to the new address.

THE PARIS EXHIBITION.—Our office in the Paris Exhibition is No. 9, the British Section of the Liberal Arts Gallery, where subscriptions can be paid or single copies purchased by persons connected with the drug trade. Our representative there, Mr. Lord, speaks French fluently, and will be pleased to render any assistance in his power to readers of THE CHEMIST AND DRUGGIST.

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Price 3*s.* 6*d.*, or by post 3*s.* 10*d.* The third edition having been exhausted, we have prepared a reprint, of which copies may now be had. The following wholesale houses supply the book with goods at the published price, 3*s.* 6*d.*:—

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Willows, Francis & Butler, 101 High Holborn, E.C.
J. Woolley, Sons & Co., Manchester.
Wright, Layman & Umney, Southwark Street, S.E.
Wyleys & Co., Coventry.

This book may also be obtained at the offices of *The Chemist and Druggist of Australasia*, Fink's Buildings, Melbourne, and 13 Queen's Chambers, Sydney, price 5*s.* From Mr. Harry V. Dakers, 24 Union Square, New York, and Evans & Sons (Limited), Montreal, at $1.25 per copy. From B. G. Lennon & Co., East London and Port Elizabeth; Lennon & Tebb, Cape Town; Bickford & Sons, Adelaide, S.A.; Sharland & Co., Auckland, N Z; and Bertie-Smith & Co., Bombay, at 5*s.* per copy.

General and Provincial News.

Mr. D. W. Greenhough, chemical broker, will remove his offices from 16 Mincing Lane to 5 Rood Lane, E.C., on September 10.

Drugs Wrecked.—Messrs. Felton, Grimwade, & Co., of Melbourne, announce that they had 644 packages of drugs, patents, and druggists' sundries on the *Cape Verde*, which was wrecked in Hudson's Bay on June 23.

Transport of Sulphide of Carbon.—A truck filled with carboys of sulphide of carbon was at the Guillatière station on the Lyons railway on Monday, when one of the carboys burst into flames, and the whole was destroyed. Two porters were severely injured.

The Quantity of Vanilla produced in the French colonies in 1886 was as follows:—Island of Réunion, 598,227 kilos.; Guadeloupe, 37,430 kilos.; St. Marie, Madagascar, 12,743 kilos.; Island of Mayotte, 5,461 kilos.; and Tahiti, 13,586 kilos. Until 1845 the exportation of vanilla from the Island of Réunion was only about 6 or 7 lbs. annually.

Mr. William Lowe, whose death by prussic acid was mentioned in our metropolitan reports last week, was formerly in business as a chemist and druggist in Chapel Street, Lynn. Leaving Lynn a few months since, he bought a tobacconist's business in London, but lost money thereby. This, it was thought, preyed upon his mind, and resulted in his suicide at Mr. Moyse's shop at Battersea, where he was engaged as an assistant. Mr. Lowe was much liked in Lynn, and was especially popular in musical circles.

Wine Licences.—An "off" wine licence, and a wholesale dealer's "off" spirit licence were granted at the Workington Brewster Sessions to Mr. William Bowness, chemist and druggist, South William Street, Workington.—A wine licence was granted at the Plymouth Licensing Sessions on August 30 to Messrs. Stidston & Martin, chemists, 89 Treville Street. This firm previously held a sweets licence.—An "off" licence has been granted to Messrs. Symes & Co., chemists, Hardman Street, Liverpool. No other chemists in the city applied.

Killed by the Elixir of Life.—Dr. Brown-Sequard's elixir of life has found a victim. Dr. Henry, residing at Bank Lick, Ky., prepared some of the fluid and injected the fluid into a decrepit old negro. The manifestations from the patient which followed showed that there was something wrong with the elixir, as the negro died in terrible agony. It is supposed that blood-poisoning was the cause of death. The negroes in the village became so incensed at the doctor that he was compelled to leave the country immediately after the disastrous experiment. He cannot be found, and it is supposed that friends of the deceased have killed him.

The Six-storey Warehouse occupied by Messrs. Humphries & Co., manufacturing chemists, and Mr. Willey, wool-merchant, at Eastbrookham, Bradford, was completely destroyed by fire at the end of last week. The fire is believed to have been occasioned by some shelves falling containing, among other chemicals, some bottles of spirits of nitre, and these are said to have taken fire. Hand-grenades, which were about the building, were used freely, but were of no avail. Messrs. Humphries were insured for 6,700*l.*, but they tell us their loss will be some 2,000*l.* above that amount. They have taken premises at Edward Street, Wakefield Road, where business is being carried on as usual.

The Prince and the Medicines.—The "Prince Caraman de Chimay, Ministère des Affaires Etrangères, Bruxelles, Belgique," signed his name, occupation, and residence in the visitors' book kept at Messrs. Burroughs, Wellcome & Co.'s stand at the Paris Exhibition a few days since, and added the following remark, which we do not venture to translate: "J'ai gouté vos produits excellents; le Consul Belge à Londres se souviendra de vous." The latter phrase may mean an order, or possibly a decoration for the head of the firm. The Prince de Chimay was the ornamental representative of the Government when the Pharmaceutical Congress met at Brussels. That is probably where he learnt the drug trade. We believe he is in Paris on his marriage tour.

The British Pharmaceutical Conference.—The programme of the Newcastle meeting has been issued by the local committee. We have already indicated the chief features of the business and pleasure to be provided. On Monday the reception at the College of Science will be rendered more attractive by two chamber concerts and an exhibition of objects of scientific interest. On Tuesday and Wednesday luncheons will be provided at Cambridge Hall between the sessions, and afternoon teas after the afternoon meetings. On Tuesday after tea drives to the parks, and on Wednesday an excursion on the river are arranged for. On Thursday a special train will convey the conferencists to Hexham, and a visit will be made to "the Duke's" house. We presume "the Duke" is so well known at Newcastle that it is not thought necessary to expressly name him. After luncheon at the Town Hall another special train will convey the party to Rothbury, from whence Cragside, the seat of Lord Armstrong, can be visited. Tea is to be offered at the Jubilee Institute, and then the return to Newcastle will be effected by train *viâ* Morpeth.

Barbarians all at Play.—A correspondent writing from Atlanta, Georgia, U.S.A., under date of July 27, says:—"At noon to-day Dr. Walter A. Taylor and Dr. Joseph Jacobs, both wholesale drugmen, met on the corner of Peachtree and Marietta Streets; they never slackened pace, but walked into each other, first passing blows and then rolling down on the sidewalk, Dr. Taylor on top. Not a policeman was in sight, but friends pulled Taylor off Jacobs, and the war was at an end. At one time the two men were partners in a business which extended from New York to Texas, their specialities being several patent nostrums. Finally they parted, when Jacobs made a wholesale cut in prices. Among the schemes resorted to by these gentlemen was the issue of circulars, which were of such a character that Anthony Comstock wrote a private letter about the suppression of Taylor's circulars, which Jacobs had lithographed and published. This action Comstock denounced as unmanly and sought the indictment of Jacobs. The latter was expelled from the Druggists' Association last week. He claims that the action was taken without giving him notice, and that it was unauthorised, as he had resigned from the association four years before. There will be more trouble yet."

A Chemist's Assistant Censured.—A person named Frances Hind, aged 48 years, committed suicide on Saturday last by taking some rat-poison, which she had procured from Messrs. Pollard & Brown, chemists. A little girl 11 years of age having bought it at the request of deceased. At the inquest on Monday, among other evidence, Mr. Thomas Milford, manager to Messrs. Pollard & Brown, chemists, High Street, said he sold a 3*d.* packet of vermin-killer to the little girl who had been called as a witness. He asked her who it was for, and she said her mother, who wanted to kill rats. He entered the sale in the usual way. The contents of the packet comprised, among other ingredients, 1½ grains of strychnine. A juror (Mr. R. George): Is it usual to sell poison to young children? Witness: There is no limit as to age, but we use our discretion. This was an intelligent child, and I knew her parents. In reply to other questions Mr. Milford said the same day he refused to serve a man with the poison, as he did not consider him intelligent enough. The jury returned a verdict that "Deceased committed suicide by taking poison, being at the time temporarily insane." They also desired the coroner to censure Mr. Milford for supplying the deceased's daughter with the poison. In doing so Mr. Blake pointed out to Mr. Milford that it behoved him to use the greatest discretion and care in selling poison of so rank a character as that in question, and expressed the hope that under no consideration would he again supply children, and likewise use his discretion even before serving adults with it. Mr. Milford essayed to speak, but the coroner told him he could not allow him to do so. A juror (Mr. Brading) thought they ought to add a rider to the verdict to the effect that the poison ought not to be sold in such large quantities. The coroner pointed out that the only way to alter this would be to get the present law amended.

Metropolitan Reports.

"Liberty" Boating Club (Burroughs, Wellcome & Co.)—The last outing of the season took place on Saturday afternoon last in lovely weather. The party, consisting of ladies and gentlemen to the number of nineteen, left Waterloo Station at 2.40 for Kew Bridge. After an enjoyable afternoon on the Thames between Richmond and Teddington Lock, the company returned to Kew Bridge, where tea was provided, followed by a musical evening.

Belladonna Mistaken for Treacle.—Three children were admitted to the University College Hospital on Saturday night suffering from the effects of poison. During the day the family to which the children belonged had moved into a new house. While the parents were busy, three of the children—a girl of eight and two boys aged six and five—began prying into the cupboards. One of them found a small gallipot containing what they took to be treacle, which they at once began to eat. Soon afterwards they became ill, and they, together with the pot, were taken to the hospital. On arriving there the physicians pronounced the contents of the pot to be belladonna, and took steps to counteract its effects on the children, with signal success.

Camwal (Chemists' Aerated and Mineral Waters Association) C. C. *v.* Barclay & Sons' C. C.—This match was played at Raynes Park on August 31. After six wickets had fallen the Camwal declared their innings at an end, and succeeded in disposing of their opponents for 35. Scores as follows:—

Camwal.		*Barclay & Sons.*	
Keith, lbw, b Truelove	19	Barclay, B., run out	7
Farbrother, c B. Barclay, b Truelove	26	Button, c Pettit, b Doo	2
Stephens, st Coward, h Thorne	28	Coward, not out	12
Doo, b Truelove	3	Truelove, l b w, b Doo	0
Pirie, st Coward, b Thorne	9	Barclay, A. E., c Farbrother, b Doo	4
Westlake, lbw, h Truelove	5	Barclay, G. R., c Keith, b Doo	1
Pettit, not out	1	Boyd, b Doo	0
Butler, Sbortrede, Hebb, and Weller did not bat.		Thorn, run out	3
		Coleman, b Doo	0
		Edmundson, b Pettit	0
		Bateman, absent	0
Extras	9	Extras	6
Total	100	Total	35

Hanson, Son & Barter's C. C. *v.* S. Maw, Son & Thompson's C. C.—Played on August 31 at Priory Farm, Honor Oak. Score:—

S. M., S. & T.		*H., S. & B.*	
Frampton, h Brambleby	9	Brambleby, b Robson	2
Lawrence, c King, b Collingwood	8	Parker, h w, b Masters	6
Jones, h Anstiss	4	King, c Jones, b Hopley	22
Robson, c Anstiss, b Brambleby	6	Collingwood, run out	7
Buxton, not out	30	Anstiss, b Masters	18
Masters, c Limehouse, b Brambleby	0	Elms, c Buxton, b Robson	10
Hopley, st Elms, b Bramblehy	0	Fletcher, not out	11
Moting, h w, b Brambleby	0	Robinson, h Masters	0
Williams, l b w, b Brambleby	2	Stokes, b Masters	0
Hardwick, c Collingwood, b Brambleby	3	Limehouse, S., not out	2
Hentsch, l b w, h Collingwood	1	Limehouse, J., did not bat.	
Extras	7	Extras	7
Total	70	Total	85

Doctors as Concert Patrons.—In the City of London Court on Wednesday, before Mr. F. J. Willmott, Deputy-Judge, Mr. Jerome Hopkins, an American professor of music, sued Dr. T. B. Crosley, of 13 Fenchurch Street, to recover 1*l.* 1*s.* for concert tickets sold and delivered. The plaintiff's case was that in December last, being about to give a concert at Princes' Hall, at which an American oratorio was to be introduced, he called upon the defendant, who was a member of the Council of the Guildhall School of Music, and asked him to become a patron. The defendant consented, and, moreover, consented to take a guinea's worth of tickets, signing a book to that effect. The tickets were forwarded, but they were not used by the defendant, who now refused to pay for them. The defendant said it was true that he consented to become a patron of the concert, but he did not agree to purchase a guinea's worth of tickets. A packet containing tickets was forwarded to him, and this he returned, but they were subsequently sent back to him again. The cover of the packet bore the word "Present," and he contended that even if he had used them the plaintiff was not entitled to payment after that. The learned judge asked the plaintiff what he meant by the word "Present," whereupon the plaintiff asked his Honour the meaning of the word "Absent." By "Present" he said he merely meant that the defendant was present when the tickets were left. His Honour said that might do on the other side of the water, but it would not do here. If the plaintiff did not intend to make the defendant a present of the tickets, he adopted a very unfortunate way of expressing himself. The book which the defendant signed was then produced, and the plaintiff pointed to certain figures which he said were in the defendant's handwriting, and which were "1 guinea." It transpired, however, that the marks alluded to were "1st January," and the defendant denied that they were in his handwriting. His Honour found for the defendant, and allowed him a guinea costs.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.

BIRMINGHAM.

Prosecution under the Medical Act.—During the last two months Detectives Thomas and Blizzard, of the Birmingham force, have been making investigations into the practice of certain persons in the city who have advertised themselves, chiefly by placards and handbills, as qualified to give medical advice for specific diseases. The two detectives have visited the establishments under the pretence of being in need of their services. As a result summonses have been granted against Mr. John Marston, trading as Dr. Hunter & Co., of Great Charles Street, also of 21 to 26 Bradford Street, carriage builder, and of Parkfield, Knowle; against Mr. C. F. Green, of 44 Great Charles Street and 149 Coventry Road, medical practitioner; and against Mr. Jesse Key, trading as Dr. Curtis & Co., 79 Hill Street. The summonses, which are eighteen in number, are made returnable for Friday of this week. In them the first and last-named defendants are charged with various infringements of the Medical Act of 1858; with knowingly, wilfully, and falsely taking and using the name or title of "surgeon," and thereby implying that they were properly-qualified medical practitioners. Mr. Green is charged with wilfully and falsely using the designation of "member of the Royal College of Surgeons," his name, it is alleged, having been taken off the register of that body some few months back.

COLCHESTER.

Mr. Wallis on the Warpath again.—Mr. Wallis, whose extraordinary letter in a local paper was noticed by The Chemist and Druggist of some weeks back, has again amused the doctors and chemists of Colchester by a still more remarkable effusion, as follows:—

Old Bank, Colchester: August 30, 1889.

W. B. Wallis and his Shabby Assailants.

In again thanking the working-classes in general, and about 64,000 of their number whom he has professionally attended, for their continued substantial support, undersigned desires to inform them that his clandestine and underhand assailants (better known than trusted), who some time ago were vigorous and noisy in their attempts to intimidate, have, since February last (when caught in their own trap), become docile, quiet, and in some instances affable in their demeanour; and this wholesome change is likely

to continue from the knowledge that undersigned will not shrink from prompt measures, through the medium of the law courts, to expose the doings of as great a pack of scamps as ever disgraced a town—and right well they know it.

Surgery, for the working-classes only, continues open as usual.

W. B. Wallis, Surgeon, M.R.C.S., &c.

Who his "shabby assailants" can possibly be, unless it be his rival doctors, or even the much-afflicted pharmacists, who do not appreciate his so-called "work of love" amongst the working-classes, one is at a loss to understand.

LIVERPOOL.

Extension of Premises.—Messrs. Evans, Sons & Co. are building in Seel Street an important extension of their warehouse. They have periodically to meet the requirements of a large and growing business by adding to their already extensive premises which cover no inconsiderable space in the centre of the city.

New Laboratory.—Messrs. Symes & Co. have leased the premises 2 and 4 Pilgrim Street, and are fitting them up as a chemical and pharmaceutical laboratory. Their old building was smaller, more distant and inconvenient, but from the number and variety of workmen employed in altering and fitting the new premises it is assumed that they intend rendering them fully adequate to their wants.

Another Suicide by Carbolic Acid.—Mrs. Mary Anne Godsell, aged 67 years, the wife of a coal merchant at Birkenhead, committed suicide on Saturday by taking carbolic acid. She appeared to have taken about a quarter of a pint. The jury found that she committed suicide while temporarily insane.

MIDDLESBOROUGH.

Alleged Assault on "Sequah."—"Sequah" appeared before the magistrates of this town a few days ago and said: "My name is William Roe. I am better known as 'Sequah.' I was coming out of the house where I am lodging, in Grange Road, last night, when a very tall man met me at the garden gate. He was waiting for me. He looked at me straight in the face, and said, 'You are a damned quack.' I went away in my trap, but he followed me, and caused a commotion. I ultimately went up to the man and asked him his name, but he refused to tell it me, and ran away. I caught him, and took him to the police-station, followed by a great crowd. At the police-station I ascertained that his name was Henry Leiston, and that he was medical assistant to Dr. Knott. It is because Leiston is a medical man that I take this action, as I have given all the doctors in the town every facility for proving whether or not I am a fraud. I wish your worships to grant me a summons against Leiston." The stipendiary ultimately persuaded "Sequah" to let the matter drop.

PLYMOUTH.

The Study of Chemistry.—Local pharmacists do not seem to feel the responsibility of providing classes for their apprentices by means of the local associations, as in more favoured towns, so that the latter have to take advantage of the teaching in connection with the Science and Art Department. The Plymouth Chemical Laboratory has just issued the results of the examinations held in May last. Appended are some of the pharmaceutical students' successes:—Practical inorganic chemistry, advanced stage, 2nd class—H. A. Roper, A. W. Sikes, and J. W. Swainson. Practical inorganic chemistry, elementary stage, 1st class—C. Brooks, E. Newman, C. Skeat, T. W. Towan, and E. T. Wood; 2nd class—E. Hodge. Theoretical inorganic chemistry, advanced stage, 2nd class—F. J. Allen, A. G. Coker, H. A. Roper, J. W. Swainson, and A. W. Sikes. Theoretical inorganic chemistry, elementary stage, 1st class—E. T. Wood; 2nd class—E. A. Hodge, E. Newman, and Charles Skeat. Practical inorganic, elementary stage, 1st class—A. G. Coker. Theoretical inorganic, elementary stage, 1st class—C. Brooks; 2nd class—A. G. Coker and H. A. Roper.

SHEFFIELD.

The Cutting Trade.—Boot's Drug Company have opened a branch in Highfield, this making the third place of business which they own in this town. The one in question has been specially fitted up for them, and presents a very good appearance. It stands a few doors above the shop which lately belonged to Mr. Dunnill, but which was disposed of a few months since to Mr. Major Miner, who makes a great display of his Major and Minor certificates in his window, probably relying on these to convince the public that his business is under personal management, as a contrast to that of his neighbours.

STOCKTON.

Defective Spirit of Nitrous Ether.—On Monday at the police court Mr. Wm. Hardcastle was charged with selling adulterated spirit of nitrous ether. Mr. Thomas prosecuted for the Corporation, and Mr. Hunton defended. It was stated that Mr. Pearson, the inspector, had purchased some of the spirit, and a certificate of Mr. Stock, the county analyst, was put in stating it to be 60 per cent. deficient in nitrous ether, and this analysis was confirmed by one from Somerset House, which had been obtained at defendant's request. Mr. Hunton pointed out that the analyses were misleading, as the spirit only contained 2 per cent. of the nitrous ether, and the deficiency was 60 per cent. of the 2 per cent., which had been caused by the unpreventible evaporation. A fine of 2*s.* 6*d.* and costs was imposed.

IRELAND.

The Dublin Mineral Water Company have opened their new premises at North Strand, Dublin.

At Dublin last week a lad named Cairns was remanded on a charge of stealing lead roofing from the premises owned by Mr. William Gore, chemist and druggist, Thomas Street.

The Naas Board of Guardians are about to erect a dispensary at Clane, the cost of which will, it is said, be close on 1,000*l.*

The Customs authorities are about to transfer the custom-house from Skibbereen to Bantry, a proceeding which is strenuously opposed by all the local merchants.

Messrs. Lemon & Co., medicated lozenge makers, Lower Sackville Street, Dublin, used last season for manufacturing purposes 200 tons of sugar.

Fire.—The Dublin Tar Company (Limited) was last week considerably damaged by a fire which originated in the chemical department. The damage is covered by insurance.

An enterprising Dublin pharmacist has lately adopted the plan of selling to his poorer customers antibilious and rhubarb pills at a halfpenny per box.

Messrs. Barrett, Dublin, appear to be doing a roaring trade in penny perfumes, the bottles being in great demand by juvenile customers.

The governors of the County Monaghan Infirmary invite applications for the position of apothecary and registrar to the institution at a yearly salary of 60*l.* The appointment will be made on August 11.

Sir James H. Haslett, chemist and druggist, Belfast, presided last week at a meeting held for the purpose of forwarding the election of Mr. Arnold Forster as Parliamentary representative for West Belfast.

The Macroom Dispensary committee notify that dispensary officers must in future provide substitutes at their own personal expense, the practice which hitherto existed of the ratepayers paying *locum-tenens* being abolished.

At a meeting of the Mitchelstown Dispensary committee, held last Saturday, Dr. Thomas O'Brien was elected dispensary officer in room of the late Mr. Edward McCraith, L.A.H. Dublin.

An old man named Connell, who was charged last week at Clonmel with drunkenness, made the very funny defence that he had had "a dhrop o' the craythur," and that some medicine

containing quinine which he got at the dispensary had, in conjunction with the whisky, "riz" in his head.

THE Board of Guardians of the Newry Union are desirous of receiving tenders for a twelve months' supply of drugs, medicines, and medical appliances for the workhouse and seven dispensaries attached. Applications not later than Monday next; the appointment to be made on September 29.

COMPETITION in dentistry has latterly become so keen that the Anglo-Dental Company, Cork, advertise that henceforth all fees taken during a prescribed portion of the day will be handed over to the hospitals for the purchase of medicines, &c.

THE Board of Guardians of the Mallow Union invite tenders for a half-year's supply of drugs and medicines for the workhouse and six dispensaries attached. Applications, they state, must be accompanied by a sample of each article, the contractor to be declared on October 6.

THE Poor Law Guardians of Irvinestown request quotations for the yearly contract of drugs and medicines to the workhouse and a number of outlying dispensaries. The appointment will be made known on Wednesday, September 10.

DR. SLOPER, L.A.H., successor to the late Mr. Boland, L.A.H., the Medical Hall, Rathmines Road, Dublin, is about to open an establishment in the North of England, family circumstances having induced him to dispose of his city pharmacy, which was subsequently purchased by Messrs. Leybourne & Clendinning, of Sackville Street.

FIRE AT A DRUG STORE.—On Saturday evening last the premises of Mr. Francis Leonard, general druggist, Clanbrassil Street, Dublin, were damaged by a fire which originated in one of the oil sheds at the rear of the building. The exertions of the brigade prevented the flames from reaching the front shops.

MR. SHEPHERD, chemist and druggist, Derry, has, subject to certain conditions, offered to devote 100*l.* to aid the Chemists and Druggists' Association in procuring the conviction of a number of pharmacists who, in his view, are habitual infringers of the Acts applying to apothecaries and medical men.

MR. EDWARD STAMER O'GRADY, M.R.I.A., &c., Dublin, has just been the recipient of a valuable present in the shape of a handsome brougham, bay horse, and costly set of harness, subscribed for by a number of gentlemen connected with medicine and pharmacy, as a slight token of the esteem with which he is regarded by the profession.

MR. JOHN W. BUSTEED, dispensary officer of the Castlegregory district, co. Kerry, has retired, after forty-five years' service; his superannuation allowance being struck at 110*l.* 12*s.*, being two-thirds of his salary and emoluments. The vacancy will, it is understood, be filled by the appointment of a local man.

TENDERS for a year's supply of drugs and medicines for the workhouse and several dispensaries are invited by the guardians of the Kilrush Union, who will meet on September 14 to appoint a contractor. Applications, together with sealed samples, are to be lodged before that date.

DUBLIN HORSE SHOW.—Some very choice exhibits of drugs and medicines were last week displayed by English and Irish chemists, amongst them being Messrs. Day, Son & Hewitt, and McMaster, Hodgson & Co., Capel Street, the former showing an attractive assortment of medicine chests and various drugs connected with animal pathology; the latter doing a large traffic in spices, patent medicines, &c.

MR. WILLIAM HYNES, L.A.H. Dublin, has served a writ of *quo warranto* upon the governors of the County Clare Infirmary in reference to the alleged illegal election of his opponent, Dr. Faris, L.A.H. Dublin, and has moved the Court of Queen's Bench to reverse the election in his favour, the contention being that there polled at the election certain persons who were not eligible to record their votes.

AN IRISH PASTEUR.—Mr. McGovern, the Cavan hydrophobia doctor, who recently sued and obtained a decree for 15*l.* due to him by the Newry guardians, payment for curing four patients sent him, has, after considerable delay and remonstrances by the Local Government Board against what they term an unauthorised and unnecessary expenditure of funds, been offered and accepted four-fifths of the amount.

THE APOTHECARIES' HALL.—Considerable dissatisfaction is evinced in Irish pharmaceutical circles in connection with the recent appointment of an English gentleman to the position of manager of the Apothecaries' Hall, Dublin. Amongst the various letters of complaint forwarded to the press is one signed "Veritas," and headed "No Irish need apply," in which the writer points out that the Hall, which is supported by Irish chemists, do not believe "Paddy" to be capable of transacting their business.

LIBERAL PHARMACEUTICAL ASSOCIATION OF IRELAND.—This recently organised body, under the vigorous management of its founder, Mr. R. J. Downes, M.P.S.I., has held one or two meetings, but the executive officers have not yet been appointed. The founder proposes to first muster a goodly number of members, and then leave to them the nomination of the most suitable representatives. The object of the association is the advocacy of a liberal understanding between the pharmacists and the chemists and druggists; recognising that the latter have grievances which demand fair and impartial arbitration. Many gentlemen from the North of Ireland have signified their intention of associating themselves with Mr. Downes's society, and have promised substantial help if required. Needless to say, the Dublin and Belfast branches of the Chemists and Druggists' Association are highly pleased at the stand so energetically taken by their new allies. It is stated that an important meeting of the "Liberals" will be held in the course of a few days.

SCOTLAND.

GLASGOW.

PRESENTATION.—On Tuesday evening the employés of Messrs. Brown Brothers & Co. met in Ancell's for a supper, and presented Mr. David Rodgerson, cashier to the firm, on the occasion of his marriage, with a very handsome present, consisting of silver plate and case of cutlery.

GLASGOW CHEMISTS AND DRUGGISTS' ASSISTANTS' ASSOCIATION.—The organising committee is actively engaged in preparing for the winter campaign. A district canvass, conducted by each member in his own neighbourhood, has already yielded encouraging results in the way of promises of support and co-operation, and the committee are making rapid progress with what is certain to be an attractive programme. Mr. A. K. Chalmers, hon. secretary, 90 Sauchiehall Street, will furnish information to any inquirer.

FRENCH PHARMACEUTICAL NEWS.

(*From our Paris Correspondent.*)

THE EIFFEL TOWER has, if nothing else, been a financial success. The total receipts, down to August 27, amounted to 3,664,000f. in round figures, on a capital of five million francs. In consequence, last week, the shareholders received the pleasant invitation to call at the office for their third 20 per cent. dividend, thus netting 60 per cent. on their investment.

VICHY PASTILLES A MEDICINE.—Since French pharmacists took advantage of the new legislation enabling them to form professional syndicates, they have reaped the benefit of association, and secured the monopoly of various debatable preparations which otherwise would have passed into the hands of grocers and dealers. The case of Vichy lozenges is one in point. Jurisprudence until recently remained contradictory, some courts holding the preparation to be medicinal, others considering it an article of diet. But pharmaceutical syndicates by keeping up the fight have compelled jurists to recognise that Vichy pastilles are a medicine. The latest case adjudicated was brought before the Lyons Correctional Tribunal by the Lyons and Rhone Pharmaceutical Syndicate. On July 11, 1889, the defendant, a non-pharmacist, was for offering and selling at retail Vichy lozenges sentenced in 500f. fine, 50f. damages towards the syndicate, and costs.

Death of Dr. Maurice Perrin.—At the sitting of the Academy of Medicine on September 3, the sudden death, at Vézelèze (Meurthe), was announced of the president, whereupon the company adjourned, as a sign of mourning. Deceased was born in 1826; graduated in 1851 as a doctor of medicine, and joined the army service. During the war of 1870 he was the physician-in-chief of Marshal MacMahon's army corps; in 1874 became sub-director of the Val-de-Grâce school; and soon after, and until recently, its director. He was, since January, 1889, the president of the Academy of Medicine. Among his most important works may be mentioned treatises on the influence of alcohol and anæsthetics on the economy; on surgical anæsthesia; on ophthalmoscopy and optometry; an atlas of the deep-seated eye diseases. Dr. Perrin was an officer of the Legion of Honour.

The Cairo Street Poisoning Cases.—A motley crowd the other day filled the Correctional Tribunal chamber to watch the conclusion of the poisoning accidents which occurred some weeks since within the Exposition. None of the victims suffered from more than passing sickness, chemical analysis having failed to discover anything else than zinc in the liquids seized at the time. The proprietor, Catani, a native of the Lebanon districts, was in the habit of preparing his exotic drinks from very Parisian syrups procured in the Rue St. Merri, and emptying every night into a galvanised iron pail the unsold beverages. But on the Sunday in question when the accidents occurred, while he was devoutly attending mass, he said his assistant, wicked Abdallah-ben-Salem, served out the slops and pocketed the proceeds. In consequence several persons suffered from zinc poisoning. The explanation, which Abdallah denied on the beard of the Prophet, was disbelieved by the Court, who acquitted the attendant and fined Catani 100 francs.

Personating a Patient.—Dr. Bouchereau, of this city, has had a narrow escape from attempted blackmailing. A short time since two women, unknown to him, came to his free consultation, and one of them, presented as a Madame Fredon, obtained from him a certificate relating to some nervous troubles from which she suffered. Next, the woman Fredon and her husband entered a complaint against Dr. Bouchereau before the Correctional Tribunal, charging him with having wilfully delivered a false certificate which caused Mme. Fredon to lose a lawsuit and her grandchild's guardianship, and finally claiming 10,000f. damages. Fortunately the doctor was advised he had been the victim of a fraud, the patient presented to him as the woman F. having been procured and accompanied by the pretender herself. Of course, the truth having been established, the complaint against Dr. Bouchereau was dismissed, and the couple Fredon wanted to withdraw. But before ending the case, the Court sentenced them in 1,500f. damages towards defendant. The moral of the story is that physicians, before giving certificates, should be sure of the patient's identity.

The Awards to Exhibitors.—According to a semi-official paper the total number of exhibitors is 56,012, and of these 859 are debarred, as jurors, from competing for prizes. The group juries have proposed the following list of awards, namely, 890 grand prizes; 5,599 gold medals; 11,104 silver medals; 10,985 bronze medals; and 9,027 honourable mentions; in all 37,605 rewards, 32,468 of which are to actual exhibitors, and 5,137 to their assistants. The furniture and social economy groups are the most favoured, nearly all exhibitors being set down for some award, while agriculturists will get the smallest percentage of prizes, and good judges say all this is nothing but plain justice. On the whole 68 per cent. of the exhibitors are to receive some recognition or other. According to rule the superior jury are to approve of group-juries' awards, but they have decided at their last sitting to accept all the proposals presented by them and ratified by the class juries, and only to act as umpires in cases of disagreement or alleged irregularities. And finally the superior jury will consider the question of decorations to the most meritorious exhibitors, of course the most important of all to those concerned. The work is not expected to be finished before the middle of this month, so that the grand distribution of prizes is not likely to take place before the last days of September.

A BABEL OF BOTANY.

THIS is the characteristic title which Mrs. Crawford, the eminent Parisian journalist, gives to her report to *Truth* of the Botany Congressheld in Paris.

"If the botanists I met" (she says) "had gone in for pro-Pasteurism or anti-Pasteurism, they would, I dare say, with their enthusiasm and concentration, have been mad as March hares. I found them charming men. But (there is a 'but' to qualify all that's best in this faulty world) three out of four were reactionists, and the old gentlemen of the Congress had personal recollections of the Comte de Chambord, whom they looked upon as a saint in Heaven. Vienna, Belgium, and Paris are the great botanical centres of the Continent. The French still believe in simples, and give more of their custom to the herbalist than to the pharmaceutical chemist. They adore flowers, which are always friendship's offerings on name-days. Holland is a great flower country too, but Brazil is the paradise of the botanist.

"A centre of the botanical world here is the Pommes de Terre Club. One of the great practical botanists of France is M. de Vilmorin, a wealthy landowner, who devotes himself to experimental culture. He had the Congress down to lunch at his seat at Verrières, a delicious village nestling on a hill to the south of the forest-clad plateau lying between that place and Versailles. M. de Vilmorin is Vice-President of the Horticultural Society of France. He keeps 100 gardeners in his Verrières grounds. They rear every variety of ornamental flowers and useful plants that can be grown in the northern part of France. A part of their business is to produce new varieties. The hundred work upon a stretch of land—a good deal of it hilly, with the watershed to the south—divided into 12,000 plots. Each plot is given up to a distinct variety.

"A plant that has got crossed by accident with a kindred species is looked upon as having lost caste, and is burned. The hecatombs of these vegetable pariahs are colossal. Said one of the gardeners, 'They talk of the difficulty of keeping canine races pure. It is child's play compared to that of keeping plants from being crossed with kindred species. They do not want to be too handsome or too pulpy or succulent, and they are always trying to revert to hardy primitive types. Such types defy the insect world, and are a protection from human beings, they not being of much use to them. Sometimes there are not four plants in a whole plot that are judged fit to be preserved. New species are created by process of selection. They are the glory of the jardinière or of the dinner-table, but by no means pets of nature.'

"M. de Vilmorin's father was also a distinguished botanist, and created a botanical museum at Verrières, which is a thing to see. Strangers can visit it at certain hours of the day. Of vegetable rarities of the edible sort produced on the estate there are wax models, and there are (I am afraid you will not believe it) 1,200 varieties of wheat alone.

"Botany owes the rush forward that it made in this century to Rousseau, Buffon, and Bernardin St. Pierre. Linnæus is given all the glory, but, so far as I know, he only succeeded in disgusting children with the science by wrapping it up in a brain-fatiguing and pedantic nomenclature. I prefer the Parisian *fleuristes'* four grand divisions—namely, scented and non-scented flowers, and those that smell nice or those that smell nasty. Who ever read, in the morn of life, "Paul and Virginia" without falling in love with the vegetable world? Marie Antoinette and Josephine also helped to open eyes to see the beauty of that part of creation. The tree was not felt in France to be a thing of beauty, as it now is, until the former planted her Trianon Park. She got many of her saplings from Vienna, and not a few from America. Washington's first act, as President of the United States, of courtesy to her was to send her a collection of American saplings. They came when she was on the steep incline which led to the guillotine." And so Mrs. Crawford proceeds to speak of horticultural matters, and the green spots on earth which have charmed her most.

Mustard-oil is used largely as a lubricator for machinery, as it does not congeal readily.

SALVAGE AND POISON.

THERE was a sale by public auction on Thursday afternoon of the fire and water damaged stock from the warehouses of Messrs. Baiss Brothers & Co., 4 Jewry Street, Aldgate. The auction took place at No. 3 Jewry Street, and along with the druggists' goods 9 tons of isinglass were sold. The latter was damaged with water, and had been recovered from the warehouses of Mr. James Vickers, isinglass importer, 6 Devonshire Square, E.C. These salvage sales, according to report, are always held on the drug-sale days, so that wholesale druggists may be unable to attend them. Whatever foundation there may be for this theory, it is at least certain that on Thursday only one or two of the druggists did look in, and they were not buyers. The fact is, the goods were shockingly damaged, and it would pay no house of repute to handle them. Yet the bidding was brisk, the agents of the insurance companies (the sellers in this instance) being overjoyed with the prices obtained. Although this sale was publicly advertised, and reference to it was made in this journal last week, there was no representative of the Pharmaceutical Society present. In the absence of restrictions, the following scheduled poisons were sold:—

	£	s.	d.
23 jars of tinctures, &c., amongst them gallons of tincture of aconite	5	10	0
A lot of spices, &c., including about 1 cwt. of opium ..	20	0	0
160 1-oz. bottles of prussic acid	1	0	0
3 drumfuls of belladonna liniment	5	0	0
1 cask of oxalic acid (with other articles)	5	15	0

These are only a few of the items. All conceivable articles were disposed of, and what makes the circumstance more deplorable is the fact that many of the purchasers were (we learnt on inquiry) brokers who had no knowledge whatever of the drug trade.

The "cutting" element was well represented at the sales, one of the largest purchasers of the patent medicines and sundries being a Midland storekeeper. Many of the "lines" which fell to him were in a very damaged state. For instance, 9½ dozen of Eno's fruit salt, with wrappers off and damaged labels, 20*s.* per doz.; 6 dozen Henry's magnesia, and 4½ dozen Bishop's citrate of lithia, 7*s.* per dozen; 8½ dozen De Jongh's oil (quarts, pints, and half-pints), 13*s.* per dozen. These are fair examples of the bargains that were going. Most of the patents were destitute of wrappers and stamps, and it is inconceivable how they can ever be sold.

Howard's quinine, 156 oz. in 4-oz. and 1-oz. bottles, fetched 1*s.* 11*d.* per oz., which is much above the maker's price. Oils went cheaply, olive and cod-liver oil especially, but castor oil at 9*l.* per 100 winchesters was by no means cheap. We noticed, however, that tinctures and similar galenical preparations sold at low prices, say about 3*s.* per gallon, including the containers. Drugs as a rule went very cheap, but it must be borne in mind that they were soaked in many instances with water, as well as damaged by fire.

Fourteen bags of drugs (ginger, camomiles, nux vomica, &c.) sold for 11*s.* 6*d.*; 19 similar for 12*s.* 6*d.*, and so on. There were 100 boxes of aloes, mostly Barbadoes, and it sold at from 12*s.* to 40*s.* per cwt. Gums—arabic, myrrh, sandarac, shellac, and the like—were sold at decidedly high prices, and the man who paid 18*l.* 10*s.* for a case of Amrad gum, a very ordinary gum arabic, and one of myrrh, will have regretted his bargain before now. Bees'-wax also reached high prices, 18*l.* being paid for a cask containing between 3 and 4 cwt.

Chemicals were sold very cheaply. For instance—20 winchesters of ether, 60*s.*; 50 1-lb. bottles Schacht's bismuth, 50*s.*; Epsom salts, 2*s.* per cwt.; over 2 cwt. of zinc oxide for 20*s.*; 80 winchesters of mineral acids, 50*s.*; 32 7-lb., 23 14 lb., and 2 28-lb. jars of bleaching-powder, 55*s.*; 350 1-lb. bottles carbolic-acid crystals, 16*l.* The isinglass was disposed of at good prices, the following being a few quotations:—Penang leaf, 3*s.* to 3*s.* 4*d.* per lb.; Bombay tongue, 1*s.* 10*d.* to 2*s.* 1*d.*; East Indian, 10*d.* to 1*s.* 10*d.*; Brazil lump, 1*s* to 2*s.* 2*d.* Much of this article was soaked, but some of it was dry, and fetched Mincing Lane prices.

From an orthographical point of view the catalogue was a study. We only give a few examples:—

"Tinct. catcheu, tinct. guxiaci sem: cohchici. Tinct. of venus, tinct. of rad. cohchici. Tinct. campho. spirits of wine, tinct. vigitalis, tinct. fingib. Three dozen tins Hamrod's asthma cure, 3 dozen Lact's pepsine, and 4½ dozen Eno's fruit salt." The last item sold at 20*s.* per dozen. The sale was conducted by Messrs. Brown, Roberts, Radmall & Co., and lasted for four hours.

GERMAN PHARMACEUTICAL NEWS.

(*From our Berlin Correspondent.*)

CHLOROFORM AND GASLIGHT.—Dr. Stobwasser has a paper in the Berlin *Klin. Wochensch.* on the "Decomposition of Chloroform Vapour by Gaslight." It had been observed that chloroform was resolved by gaslight into various products, including phosgene gas, hydrochloric acid, free chlorine, and other products not yet determined. The author accordingly made numerous experiments with air contaminated with these decomposition products, and from the physiological results obtained is convinced that these bodies possess powerful toxic properties. He therefore recommends that there should be thorough ventilation in all operating-rooms, and that care should be taken to avoid gaslight being brought near the chloroform vapour. This is interesting to chemists, as hitherto when bad effects have been produced by chloroform the brand has generally been abused.

TREATMENT OF DIPHTHERIA.—In the same journal Dr. Rennert recommends to treat diphtheria by tampons of an acid solution of corrosive sublimate. Corros. sublim., gr. 10; ac. tart., gr. 50; water, 1 pint, were used. The diphtheritic membrane was effaced by rubbing with the tampons, and the clear surface thus produced was disinfected by the corrosive sublimate. Dr. R. has used it in sixty-two cases during the last fourteen months, and has had good effects in every case.

A BOTANICAL GARDEN is to be formed in the Cameroons, the principal feature being the cultivation of such plants and drugs as may be of value technically or medicinally, and which, when found capable of utilisation, are to be more extensively cultivated on plantations, &c. The Berlin Botanical Gardens have already delivered finished collections of plants, especially of indiarubber plants, and also of *Pogostemon patchouli*, to increase the supply of patchouli leaves.

CIGAR RISKS.—Dr. Ringk read a paper before a Berlin medical society the other day, in which he drew serious attention to a hitherto unsuspected evil lurking in the soothing cigar, which, according to him, offers special facilities for an introduction to the lively members of the bacilli group, and especially to our old friend the tubercle bacillus. The doctor pointed out that cigars were made in factories, and as the labour required is of the lightest, the factory hands are usually very feeble, weak-chested beings—many, indeed, suffering from tubercular disease, so that in rolling the cigar the dried dust containing the bacilli gets inside. Further, it is a fact that sometimes the worker moistens the tip of the outermost leaf of the cigar with the tongue, thus adding to the danger. Dr. Ringk suggests that all such factories should be controlled by Government, who should see that none but healthy persons are employed, or better still he thinks it would be if persons would give up cigars and take to pipes.

THE BEER-BOTTLE AND CARBOLIC ACID.—The beer-bottle is not unknown here as an ordinary container of carbolic acid. Some of the poison was legally labelled, but was sent out in a beer-bottle, and somehow got included among the stock of a clergyman, by whom it was eventually taken with fatal results. The matter gave rise to much discussion, and the seller, a druggist's assistant, was arrested for manslaughter, but has been ultimately acquitted, the mishap being treated as a pure accident.

ASSISTANTISM.—The *Pharm. Zeit.* has published some specimens of alleged sauciness on the part of some assistants, who use post-cards to express their opinions respecting situations. One wrote that he should be pleased to accept the situation offered, if his would-be employer would supplement it by obtaining for him some municipal appointment, such as lamplighter, town crier, or road-sweeper, but that if he should perchance have a vacancy for a menial servant he would prefer that, as he would then certainly have higher wages.

BANKRUPTCY REPORT.

Re ROBERT MAUCHLIN, 1½ Albion Terrace, Fowler Street, South Shields, Chemist.

THE first examination of the creditors under this failure took place at the Newcastle-on-Tyne Court on August 29, before Mr. Registrar Ingledew, when the debtor, in answer to the Deputy Official Receiver, said he commenced business on December 1, 1888. He had then 50*l.* in cash, which had been given to him, and the fixtures, worth 90*l.*, were put in by another person. Amongst the bundle of receipts handed to the Official Receiver was one from Mr. G. H. Murton for 90*l.*, dated two days before he had filed his petition, but he had not paid that person a penny, and the receipt was simply put in *pro formâ*. He had never been in partnership with any person. The book produced contained the whole of his takings since commencing business. The other book showed his creditors' accounts, and also the money owing to him from customers. Dr. Crease paid him an account of 17*l.*. he believed, in June ; it was paid by a cheque which he himself paid to someone, but to whom he could not remember. He would endeavour to find out to whom he paid it. The subsequent items paid to him of 7*s.* would not be entered in the cash-book, they would go into the till and be counted as takings. His liabilities were 235*l.* 5*s.* 7*d.*, and his free assets 109*l.* 17*s.* 7*d.*, leaving a deficiency of 125*l.* 8*s.* He had no household furniture; he had parted with it three years ago in Belfast. He had no property, or any in expectation ; and his life was not insured. There was no rent due for the shop. Mr. Wilkinson, of Pendelton, Manchester, had taken out a judgment against him, and there was a writ from another firm. There was no bill of sale on his stock or fixtures, and he had given no preference to any creditors. He had paid Messrs. Evans & Co., of Liverpool, 12*l.*, and other creditors certain amounts, but not with the intention of giving anyone a preference. He had paid nothing since July 17, and had given nothing to his solicitor. There had been no private meeting of his creditors. The causes of his insolvency were want of capital, and his inability to make the business pay. He had not been able to do the trade he expected. He thought he was justified with the small amount of money he had in hand in paying so much for fixtures, and in contracting 235*l.* for goods. He expected a relative to assist him with bills when they became due. But when he took the bills to him he refused to do so, when he saw the small business he was doing, and remarked it would only be throwing good money after bad. The promise to assist him was made to him when he started business, and he relied upon it. He never told any of his creditors about it when he was getting credit. He owed Messrs. Evans & Co. 167*l.* 9*s.* 1*d.* When he opened the account it was possible he did tell them the accounts would be paid in cash when they became due. Did not remember them telling him their conditions for "setting-up" orders were cash. Six months after he commenced he told their traveller that he would have to see his relative, and the money would be sent on to the firm. He then knew—that was, in May—that he was insolvent. Since May Messrs. Evans had supplied him with goods after he had told them he could not pay them. During the time he had been in business he had prepared no proper statement of his affairs. Whilst in business he had lost no money through anything else. The whole of his receipts were shown in the books, but they did not show the whole of his expenditure. He drew about 1*l.* per week to keep himself in lodgings, and he sent to Liverpool about 2*l.* per week to keep his wife and eight children. According to his cash-book his takings were only 5*l.* per week, and he knew that the profits on 5*l.* would not amount to 3*l.* He knew from the first month he was in business that he was going to the bad, and that he could not succeed without assistance, but he relied on his relative. His rents, rates, boy's wages, and printing bills would swallow up all the profits he had made, without any expenses of living ; he had known this from the first, but he always hoped the business would grow.

In answer to a question, debtor said a box of drugs and chemicals had been taken away from his premises two days before he filed. But it did not belong to him. It had been sent to him by an old chemist shortly after he commenced business to see if he would purchase any of the contents. There were none of any use to him, and the box had lain about the place. He sent to tell the man, knowing that he was going to file, that he had better take it away, and this was done.

The Deputy Official Receiver said the matter had been reported to him, and the circumstances looked suspicious. He had, however, made inquiries, and the result tallied with what debtor had said.

The examination was adjourned for a week.

Gazette.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

Black, Walter Shaw, Bedale, surgeon.

Preston, Alfred Prince, late of Middlesbrough and Marske-by-the-Sea, chemist and druggist.

FIRST MEETING AND PUBLIC EXAMINATION.

English, Thomas Barry, Canterbury, physician and surgeon—Sept. 9, Official Receiver's office, Canterbury ; Sept. 20, Guildhall, Canterbury.

ADJUDICATION.

Willey, Ambrose, Margate, surgeon.

ORDERS MADE ON APPLICATIONS FOR DISCHARGE.

Abbott, John, Nottingham, chemist—discharge suspended for nine months.

Butler, Patrick, Wells Street, formerly of Margaret Street, Cavendish Square, physician—discharge granted.

WE are asked to state that the announcement in the *Gazette* last week of the dissolution of partnership of "Henry Gilbertson & Sons, druggists' sundries manufacturers, Old Bailey and St. Andrew's Street, City," refers exclusively to the old firm (Henry & Edmund Gilbertson), who sold out their interest at the beginning of this year to Messrs. Dixon, Dowell & Taffs, who now carry on the business under the old style, as already announced in THE CHEMIST AND DRUGGIST.

MARRIAGES.

[*Notices of Marriages and Deaths are inserted free if sent with proper authentication.*]

CRAIG—WILSON.—On August 28, at St. Andrew's Episcopal Church, Aberdeen, by the Rev. J. W. Burton, M.A., Andrew Craig, jun., chemist, to Helen Williamina (Mina), second daughter of Alexander Wilson, 18 Powis Terrace Aberdeen.

MCNAUGHT—COOPER.—On August 28, at the Belmont Presbyterian Church, Belfast, by the Rev. Henry Osborne, M.A., Andrew McNaught, pharmaceutical chemist, Belfast, to Jane, eldest daughter of Mr. John Cooper, of Hollywood.

DEATHS.

ABBOTT.—On September 3, Mr. John Thomas Abbott, until 1882 proprietor of the Apothecaries' Hall, Bondgate, Darlington, died at his residence, Chelsworth House, Pierremont Crescent, Darlington, from heart disease, in the sixty-fifth year of his age. Mr. Abbott, who was educated at a local school, served an apprenticeship as grocer and chemist to Mr. Benson on the High Row, and afterwards set up in business in Bondgate, at Apothecaries' Hall. Later on he removed to what is now known as Abbott's Apothecaries' Hall, at the bottom of Bondgate, retiring from business in 1882, and being succeeded by Mr. Nicholson.

BICKFORD.—On June 22, 1889, at the Adelaide Hospital, South Australia, Mr. William Ferguson Bickford, eldest son

of Mr. William Bickford, J.P., of the firm of A. M. Bickford & Sons, wholesale druggists. Aged 18. The cause of the death was an accident in the hunting field.

HODGKINSON.—On August 22, Mr. John Samuel Hodgkinson, chemist and druggist, Matlock Bridge, Derbyshire. Aged 53.

MASON.—On August 30, at his residence, Adolphus Road, Finsbury Park, Mr. Henry Cornwall Mason, chemist and druggist and commission merchant. Aged 49. Mr. Mason was in business some twenty years since in Preston, and subsequently removed to London, carrying on business for a time in the Edgware Road. He brought with him from Preston certain specialities, the principal being a "Perfumed Carbolic Acid," which became somewhat popular, and with these and one or two agencies he embarked in a wholesale way in Finsbury some fifteen years since. His business grew, and for a number of years past he has occupied a good-sized warehouse in Australian Avenue. Here he added the agency for Messrs. Seabury & Johnson's plasters, Gibson's lozenges, Wells, Richardson & Co.'s diamond dyes, and other products. Of late he has been agent for Johnson & Johnson's plasters, instead of for those of Seabury & Johnson, the latter firm establishing their own warehouse in London. Mr. Mason was probably a victim of overwork. His close application to his business in London was only relieved by rapid business journeys in the provinces, and nearly a year ago his health gave signs of failing. He was seized with a violent illness at Bradford last November, which Sir Andrew Clark declared to be angina pectoris. Recovering somewhat, he still attended closely to business, but rather more than a month ago was compelled to lay it aside. A rest at Hunstanton failed to restore him, and he came home very ill, succumbing, as we said, on Friday last. He leaves a widow and large family, his two eldest sons having been for some time engaged in his business. On them will probably devolve the task of continuing it, and we understand that arrangements are in progress which will provide for the necessary management.

NEVILLE.—On August 17, Mr. James Neville, chemist and druggist, Wallgate, Wigan. Aged 64.

PROTHEROE.—On August 19, Mr. John Godwin Protheroe, chemist and druggist, Chard Street, Axminster. Aged 31.

SAUNDERS.—On August 30, Mr. Thomas S. Saunders, chemist and druggist, of the firm of Roberts & Co., 76 New Bond Street, London. Aged 38. Mr. Saunders, who was very popular among the chemists of the West-end, and with all people with whom he came into contact, was apprenticed with Messrs. Gibbs & Gurnell, of Ryde, Isle of Wight, and was subsequently engaged in the Paris house of Messrs. Roberts & Co. About ten years ago he came to London, and has since managed the Bond Street business as London partner. The funeral, in Highgate Cemetery, on Tuesday, was attended by the staff, and wreaths from them, from his partner, Mr. Backhouse, and from many other friends, completely covered the coffin.

THOMPSON.—On July 11, of cancer, Mr. James Dill Thompson, chemist and druggist, 207 Bourke Street, Melbourne, Victoria. Aged 45. Mr. Thompson was a son of Dr. Andrew Thompson, of Londonderry, Ireland, and after serving an apprenticeship with his father, went to Victoria in 1861. He had appointments with Mr. William Johnson, of St. Kilda, and with Messrs. Hood & Co., of Elizabeth Street. He commenced business on his own account in 1874.

WILLIAMS.—On August 21, Mr. Thomas John Williams, chemist and druggist, Ordsal Lane, Salford. Aged 49.

MR. E. M. ARNDT has found a volatile alkaloid in ipecacuanha. He was distilling a mixture containing the powdered drug, and found that the distillate had an alkaline reaction and was fluorescent; the alkaloid was obtained in cross-like crystals, fluorescent at the edges, and deliquescent. He does not think it is emetine, but is it not a decomposition product or emetine carried over mechanically? It is well to bear in mind that many non-volatile salts, especially chlorides, evaporate along with steam.

EXTRACTS FROM THE REGISTER OF DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act, making any of these arrangements binding upon dissenting creditors.

Carr, Peter Ditchburn (trading as P. D. Carr & Co.), 28 Chapel Street, Liverpool, and Hill Side, Kirby Park, West Kirby, chemical broker. Trustee: Wm. C. Spencer, Liverpool, C.A. Date, August 26; filed, September 2; unsecured liabilities, 14,271*l.* 9*s.* 11*d.*; estimated net assets, 1,061*l.* 0*s.* 6*d.*; creditors fully secured, 1,918*l.* 12*s.* 2*d.* Composition, 3*s.* 4*d.* in the pound by instalments, 1*s.* 6*d.* in cash in one month, 11*d.* in 7 months, and 11*d.* in 13 months from date hereof.

	£	s.	d.
Booke, Henry, Sons & Co., Liverpool	106	0	0
Bossil, G., & Co., Havre	918	0	0
Busch & Co., Havre	322	0	0
Carr, Mrs. H. M., West Kirby	300	0	0
Chadwick, T., Manchester	180	0	0
Christiansen, Aug., Liverpool	207	0	0
Clews, Henry, & Co., New York	352	0	0
Elmondson, A., & Son, Liverpool	103	0	0
Gooding, Davis & Co., Widnes	824	0	0
Gamble, I. C., & Son, St. Helens	15	0	0
Hall Bros. & Shan, Widnes	703	0	0
Harwood, J., Bolton	350	0	0
Hayn, Roman & Co., Havre	926	0	0
Hirklatz & Co., New York	1,015	0	0
Hutchinson, John, & Co., Widnes	170	0	0
Law Bros., Liverpool	17	0	0
March, P., Liverpool	39	0	0
Mathieson, N., & Co, Widnes	204	0	0
McGowan, R., Liverpool	10	0	0
Muspratt, James, & Son, Liverpool	118	0	0
Schmidt, Theodor, Hamburg	5,863	0	0
Slack, Ashcroft & Co., Liverpool	28	0	0
Spence, Charles, & Co., Liverpool	92	0	0
Widnes Alkali Company (Limited), Widnes	277	0	0

Stanford, Joseph Henry, 2 Red Lion Square, Stamford, chemist and druggist. Trustee: Cephas Wigmore, Stamford, accountant. Date, August 24; filed, August 29; unsecured liabilities, 2,661*l.* 9*s.* 9*d.*; estimated net assets, 980*l.*; creditors fully secured, 25*l.*

	£	s.	d.
Barclay & Sons, London	90	0	0
Barron, Harveys & Co, London	45	0	0
Blundell, Spence & Co., Hull	21	0	0
Charge, Charles, Stamford	24	0	0
Hirst & Cooke, Hull	23	0	0
Hopkinson & Co., Grantham	28	0	0
March, Caroline, Newark	203	0	0
March, Caroline, Stamford	401	0	0
March, Frederick ,,	375	0	0
Maw, Son & Thompson, London	16	0	0
Northamptonshire Banking Company, Stamford	840	0	0
Patterson, George, Ulverston	282	0	0
Pilcher & Sons, London	23	0	0
Stanford, E. M., Stamford	102	0	0
Stoyell, A. W. ,,	18	0	0

Webster, Lupton & Co., 4, 6, and 8 Comus Street, Liverpool, chemical, drug, and drysaltery merchants. Partners, Henry George Webster, 19 Salisbury Road, Wavertree, Liverpool, and Francis Joseph Lupton, 33 Fell Street, Edgehill, Liverpool. Trustee: George H. Webb (trading as) Liverpool, C. A. Date, August 26; filed, September 2; unsecured liabilities, 284*l.* 5*s.* 8*d.*; estimated net assets, 337*l.* 9*s.* 6*d.*; creditors fully secured, 120*l.*; composition, 10*s.* in the pound within fourteen days from date hereof, payable supplemental to deed of assignment dated July 26 (by one Mary T. Lupton).

Re **Webster,** separate estate: unsecured liabilities, 276*l.* 13*s.* 8*d.*; estimated net assets, 5*l.*

Re **Lupton,** separate estate: unsecured liabilities, 118*l.* 16*s.* 7*d.*; estimated net assets, 332*l.* 9*s.* 6*d.*; creditors fully secured, 120*l.*

"ANTIPYRIN EPILEPSY" is the name which is applied to cases of poisoning by the new antipyretic.

THE COMMERCIAL BAROMETER.

THE July returns, both of imports and exports, contrast advantageously with those for June, which appear to have been exceptionally unfavourable in the monthly series of the present year. Those for July exhibit satisfactory results as regards quantities, value, and price, with two unimportant exceptions—first, of the tonnage of exports exclusive of coal, which show a decrease of 1·7 per cent., and, second, of the average price of exports, including shipment of coal, which show a decrease of 1·0 per cent. Excluding coal, however, the price of exports shows an increase of 4·0 per cent.

JULY, 1889, COMPARED WITH JULY, 1883.

A.—Imports.

1. Tonnage of vessels entering United Kingdom has increased from—
   2,631,000 to 2,878,000 = 9·0 per cent.
2. Value of imports has increased from—
   30,706,000*l.* to 35,873,000*l.* = 16·8 per cent.
3. Average price per ton has increased from—
   11*l.* 14*s.* 0*d.* to 12*l.* 8*s.* 0*d.* = 5·6 per cent.

B.—Exports.

1. Tonnage of vessels clearing from United Kingdom has increased from—
   2,828,000 to 2,962,000 = 4·7 per cent.
2. Value of exports has increased from—
   27,273,000*l.* to 28,229,000*l.* = 3·5 per cent.
3. Average price per ton has decreased from—
   9*l.* 12*s.* 0*d.* to 9*l.* 10*s.* 0*d.* = 1·0 per cent.

C.—Coal Exported.

1. Quantity of coal exported from United Kingdom has increased from—
   2,482,000 to 2,694,000 = 9·4 per cent.
2. Average price per ton of coal exported has increased from—
   0*l.* 8*s.* 2*d.* to 0*l.* 10*s.* 3*d.* = 25·5 per cent.
3. Quantity of bunker coal shipped in foreign trade has increased 9·4 per cent.

D.—Exports (exclusive of Coal).

1. Tonnage clearing from United Kingdom has increased from—
   1,187,000 to 1,166,000 = 1·7 per cent.
2. Value of exports has increased from—
   26,266,000*l.* to 26,878,000*l.* = 2·3 per cent.
3. Average price per ton has increased from—
   22*l.* 2*s.* 0*d.* to 23*l.* 0*s.* 0*d.* = 4·0 per cent.

Imperial Federation.

PHARMACY IN MEXICO.

A CORRESPONDENT of the *Western Druggist* states that the requirements for practising pharmacy in Mexico are of such a nature as to practically exclude foreigners. The applicant must be a graduate, and his diploma has to be accompanied by a certificate from the college [in U.S.A.] stating that it is genuine; then there must be another certificate from the governor of the State in which the college is located, stating that the college is a reputable institution. This certificate has to be countersigned by the nearest Mexican Minister, and should there be none in the State, it must be sent to Washington, D.C., and there signed by the Mexican Minister, and from there it must be sent to the Minister of Foreign Affairs at the city for its final signature, and it is then recorded at the last-named city. After all of this "red tape" formality has been complied with, the applicant is entitled to examination, which is, of course, all in Spanish. Having passed the examination satisfactorily, he is paid a considerably smaller salary than similar talent would command in the United States.

The writer then goes on to give an account of a pharmacy carried on by Mr. L. E. Lafon, in Chihuahua. Nearly all of the houses are built on the plan of a hollow square, with a courtyard in the centre—a patio it is called—so the house is all around the yard instead of *vice versâ*. This makes the length of all shops parallel to the street, and only one counter is needed, which extends through the shop from one end to the other. Excepting this, the general arrangement of the shop is similar to those in the United States. Ointment-jars are more numerous, and make a very pretty display; but most of them are empty, and serve only as an ornament. Show-globes are quite popular, but the sign of the mortar and pestle is absent from all the shops except Mr. Lafon's. He is enterprising enough to keep a stock of American goods for his friends from the United States. The most common patent medicines are to be had here, but at prices that seem surprising, for, owing to the difference in value of Mexican and U.S. money, import duty, which is very high—and freight, too—is no small item of expense, so that $2.50 for Ayer's sarsaparilla or 75c. Winslow's soothing syrup is not as high as it seems; but, at any rate, it puts such luxuries (?) almost beyond the reach of poor people.

French and German chemicals and preparations are mostly used, being preferred on account of their greater purity, although prices and duty make all cost about the same. The Pharmacopœia is not issued every ten years, nor to any regular interval. It is compiled by the various colleges of medicine in the city of Mexico, and is said to be largely, if not wholly, compiled from the French Codex.

The metric system is in most common use for prescriptions, though grains and drachms are still used by some, but only a few. The Spanish drachm has 72 grains, but as they are lighter than our grains, it takes about 72 of them to equal 60 English grains. The pound (libra) is the standard of weight in commercial use for small quantities. The arroba (25 lbs.) is used for larger quantities, and carga is used for still larger quantities. It is 300 lbs, and is considered a load for a "burro" (jackass). The Spanish yard of 33 inches, called a vara, is used much oftener than the metre. The Government has adopted the metric system, and all duties are paid by the kilo., and railroad subsidies are granted at so much per kilometre.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, at any time within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "Trade Marks Journal," September 4, 1889.

Figure of a crocodile and river; for chemical substances (Class 1). By William Taylor, Jun. & Co. (Limited), Taylor's Wharf, Limehouse, E.C. 89,163.

"LACTACIDINE"; for an antiseptic. By P. Grosfils, Verviers, Belgium. 89,284.

"LAXATONIC," and other wording on fancy label; for proprietary medicine. By E. Hunter, Silver Street, Hull. 83,902.

"KOUGHTUS"; for cough mixture. By G. W. Spragett, Tontine Street, Hanley. 86,432.

"THE ROYAL SKIN IMPROVER," and other wording on label; for a skin improver. By J. H. Smith, 112 Southville, Wandsworth Road, S.W. 87,486.

Fanciful design (symbolic figure of lightning on a bird's back, and motto); for an embrocation. By George Emoore, 24 Aylesbury Street, Walworth. 88,982.

Design (a hand grasping five adders, which represent rheumatism, &c.); for medicines. By W. Hatherell, 1 Primrose Hill, Salisbury Square, E.C. 90,332.

"BIB"; for olive-oil soap. By Buchanan Bros., 19 Prince's Square, Glasgow. 87,895.

"URINO-CLINIC," on figure of a test tube (label); for instruments, &c., for surgical purposes. By Wilson & Son, West Park, Harrogate. 88,865.

"THE OSTRICH BRAND," and figure of an ostrich; for lime-juice cordial. By T. A. Shepherd & Co., 70 Mark Lane, E.C. 88,934.

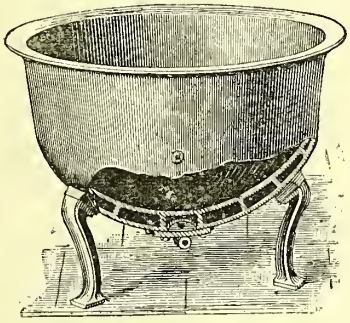
Figure of a bison; for mustard. By J. Farrow (trading as Farrow & Co.), Holbeach. 90,309.

THE PARIS EXHIBITION.

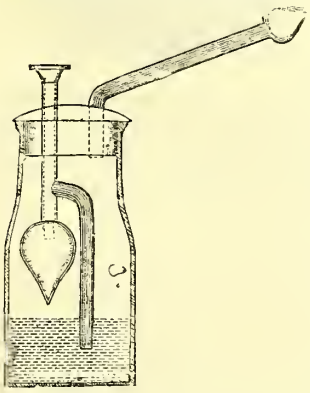
(EIGHTH NOTICE.)

THE AMERICAN SECTION.

LAST week we left off in our report at a description of some odd pieces of apparatus, and resuming with a description of the exhibits by one of the most ingenious nations on the globe, attention should first be called to the Edison show—a wonderful tribute to this man's genius. We shall not attempt to describe the exhibit, nor the one by the ENTERPRIZE MANUFACTURING COMPANY, of Philadelphia, whose tincture-press and drug-mill are so well known to chemists, and are exhibited here by J. G. ROLLINS & Co., of Old Swan Wharf, E.C. Close to this is a group of articles exhibited on behalf of the makers by G. M. BAILEY, of Buffalo. We noticed amongst these a cast-iron seamless steam-jacketed pan, of which we give an engraving.



The manufacturers are H. WM. DOPP & SON, Buffalo, N.Y., who claim that the pan is "the most perfect kettle made." It is made in eighteen sizes, ranging from 1 to 500 gallons. The kettles are perfectly smooth both inside and outside, and are cast in one piece. Between the outer and inner shell are a number of connections, answering the purpose of stay-bolts, which render the kettles able to withstand any pressure to which they might be subjected from an ordinary steam-boiler. These connections conduct a great amount of heat from the outer to the inner shell, thus utilising it more fully. The kettles can be used with any steam-boiler, being perfectly safe with 130 lbs. pressure. We may add that the jacketed portion only extends as far as shown, so that oxidation at the surface is not promoted. Next we noticed in Mr. Bailey's collection a patent vaporiser, made by J. D. C. KNAPP, of Minneapolis, Minn. It is introduced directly to the public as an instrument which is "neither an atomiser nor inhaler, but a vaporiser." The vaporiser is to be used for bronchitis and similar complaints. We show its construction. Its size may be judged from the height of the bottle, which is five inches. Reading the maker's pamphlet, we are apt to put down this vaporiser as an extraordinary affair; but it turns out to be an ammonium-chloride inhaler. The bulb of the funnel tube is nearly filled with pure hydrochloric acid, some water, and "8 or 10 drops of aqua ammonia" are placed in the bottle, along with some of the medicine prescribed; then the patient puts in the stopper, with its tubes, and inhales. There is no means at all for vaporising the medicines, yet Mr. Knapp gives fifteen prescriptions, and some of them contain substances which cannot be vaporised without decomposition. We fear that Mr. Knapp's vaporiser will not do all that it says. Nevertheless, there is a good idea in it for a new ammonium-chloride inhaler.



PERFUMERY AND TOILET PREPARATIONS.

Our second report of the world's great show was solely devoted to French perfumery, and we may safely say that, owing to the exigencies of space, we did not exhaust the subject. France is the land of the perfumer. For that reason it is a bold stroke for the perfumery manufacturers of other countries to display their products in the Exhibition, and the Americans are consistent with their chief national characteristic by being in the front of the attack, for there are about a dozen meritorious exhibits in this class in their Court. North America is not a perfume-flower growing country, yet the dozen exhibitors are only a few of the many perfume-distillers in the United States.

"Why is it," asked our representative of Mr. Theo. Ricksecker, one of the exhibitors, "that American firms are so prominent in this department?"

"There is a large and increasing local demand. Fancy changes, and we, being on the spot, are better able to minister to fancy than European makers."

"Have you flower-farming in the States?"

"Not any to speak of. We import the floral pomades from Europe. It would not pay us to import French essences, and we prefer to distil the perfumes ourselves."

"Then that is the secret of your enterprise—you want to save freight, and so import the pomades."

"Just so. But we claim a distinct individuality for American perfumes. The finest are highly concentrated, well matured, and of charming aroma. Look, too, at the style in which American perfumes are put up. We have struck out a new line there, and artistic taste in get-up helps trade."

There is a deal of truth in what Mr. Ricksecker says. Take, for example, the exhibit of COLGATE & Co., of New York, whose agents, Burroughs, Wellcome & Co., have arranged their manufactures in one of the Indian Palace show-cases. The inside of this case is elegantly draped with festoons and curtains of crimson velvet, Oriental vases adding to the decorative style and relieving the plainness which bottles of perfumes and soaps might induce. "Cashmere Bouquet" is, of course, the principal perfume, and, although there are others, we may take it as typical of what the firm produce. It is one of the few perfumes which create a memory, and, in association with "Cashmere Bouquet Soap," has acquired a name and popularity in the States quite ahead of all others. Now we have it here, and it has taken a hold. A New Orleans firm (DOUSSAN FRENCH PERFUMERY COMPANY) have a case in the Court which deserves inspection if for nothing else than the manner in which it encourages laziness. That is because it is circular and revolves, so that, standing in one spot, we observe how quaint the names of the perfumes are, and how well they are put up; but, unfortunately, we have no means of proving that they are "Delicate as a cobweb: lasting as the hills." LADD & COFFIN, the makers of Lundborg's perfumery—an established favourite in Great Britain—"take the cake" in that respect, for at their stand, Burroughs, Wellcome & Co. have arranged for a liberal distribution of 1-drachm sample-bottles, and the celebrated Silver Fountain seldom ceases to yield its trickling stream of "Edenia" or "Rhenish Cologne." Apart from this display, the exhibit is highly interesting, as it is artistically arranged, and the variety of perfumes and styles of bottles are enticing. Not less deserving of notice is the exhibit by C. A. MANN & Co., of New York, who, in a nicely modelled oblong case, display their perfumes put up in those fascinating old-fashioned-looking bottles which always make us expect something good. In this instance the expectation is fully realised, Mann & Co.'s

perfumes being very choice, as many of our readers know. In their exhibit "Violet Water" takes, with Eau de Cologne, a leading place, and bulk perfumes are also shown. Behind this is THEO. RICKSECKER'S case. The exhibit consists of a number of toilet preparations put up with much good taste. The perfume bottles are unique in shape, each one contains a piece of gold leaf, and the labels are very attractive. Somewhat isolated from these exhibits is the one shown by the GOLDEN GATE PERFUMERY COMPANY, of San Francisco. Here they sell their specialities, chief of which are the Californian perfumes. Elsewhere in the Court will be found an exhibit by G. LORENTZ, of Toledo, Ohio, the perfumes being in exceptionally well engraved bottles.

In a collective exhibit by the "TAMPA, JACKSONVILLE, AND KEYWEST SYSTEM OF RAILWAY AND STEAMBOAT AND STEAMSHIP COMPANIES" we found a few perfume specialities made by the FLORIDA PRODUCE MANUFACTURING COMPANY. These were "Florida Toilet Vinegar," with a cedar basis, and Orseola Perfume and Dentifrice Water—which are of an allied odour, and have something of novelty about them. Here also is a collection of good honeycomb and Turkey sponges from the field adjacent to Cedar Key, Levy Co., Fla., the annual produce of which is valued at $650,000. These are exhibited by Mr. J. O. ANDREWS, of Cedar Key. Dr. J. B. ROTTENSTEIN, a leading Americo-Parisian dentist and the author of a number of dental books, such as "Reserches sur la Carie dentaire," makes a nice exhibit of his "Elixir Royal," purodentine, pâte dentifrice, and other specialities. His books are also shown, with a letter from the late Paul Bert, who had a high opinion of the doctor's abilities and accepted the dedication of one of the books. In connection with this we may call attention to the exhibit of BAILEY'S indiarubber tooth and other brushes, which, as American manufactures, are shown in the Court. The "Future Ideal Tooth-brushes," made of corrugated felt, have taken the Parisian fancy owing to the exhibit here. There are also several exhibits of toilet soaps in the Court, but we may pass these by in favour of the more interesting

PHARMACEUTICAL EXHIBITS.

These are not numerous—the fingers of one hand will cover them—and the goods are well known. When Frenchmen speak of soft paraffin they do not refer to it by fanciful names; they simply call it "Vaseline," be it made by the CHESEBROUGH MANUFACTURING COMPANY or not. Yet vaseline is more than a name in France; it is a popular article with many rivals, some of which had the reputation at one time of figuring in Parisian pastry. The Chesebrough Company endeavour to illustrate in their handsome exhibit the more legitimate uses of vaseline. They show the crude article, the refined product, which goes by the name of "Petrolatum," and the superior product, "Vaseline." All the toilet preparations of the last named are exhibited, and along with them a series of compound ointments (excellently made), which show the medicinal applications of the article. A number of medals help to prove that vaseline comes to the Exhibition with a world-wide reputation, which the jury cannot ignore. BURROUGHS, WELLCOME & CO. are close by with the single product that they do not manufacture in England—Hazeline. This being distilled from the fresh bark of *Hamamelis virginica*, which grows in the United States, cannot well be made in England. But the exhibitors have succeeded in bringing two stalwart plants from America. These are shown in vigorous growth at each side of the case, and they give an opportunity of verifying the correctness of the conformation of the leaves shown in the appended figure. It is a notable circumstance that the aborigines of America, from whom our knowledge of the remarkably astringent properties of the drug is derived, invariably use the fresh bark, their belief being that when dried it loses its peculiar properties. This is, in a measure, verified by the fact that the action of hazeline differs materially from that of the fluid extract of hamamelis. One of the most amusing incidents of the Therapeutic Congress, held last month, was when a solemn *savant* read a paper fully describing hazeline, and giving a long string of clinical notes which demonstrated the therapeutic value of the article. Mr. Burroughs happened to be present, and it must have surprised him to hear his product get such a cheap advertisement. The meeting proceeded to discuss the paper, the discussion, like many more, consisting mainly of compliments. Then a cute Frenchman got hold of the specimen-bottle, noted that it was a speciality—the horror of it, not a French one!—and not an alkaloid! That termination *ine* is responsible for many things. In association with the exhibit of hazeline and its ointment there is in the case a full assortment of the digestive products manufactured by FAIRCHILD BROS. & FOSTER, of New York, for which Burroughs, Wellcome & Co. are the European agents. The Fairchilds have solved one of the problems which have yet to be attacked for the benefit of pharmacy generally—namely, how to produce in an elegant manner pepsin which has all the potency of its natural state, which is soluble, and cheap. We are not in a position to say how Fairchild's pepsin is made; one authority told us lately that, like Topsy, it is "growed," and, funny as the idea may seem, there is something solid behind it. At all events the makers are here with all the products of the stomach and pancreas which are necessary for promoting artificial digestion, shown as they come into the market, and in bottles which exhibit their appearance. The largest space in this section occupied by pharmaceutical articles is that secured by WILLIAM WARNER & CO., of Philadelphia. The exhibit is of an imposing character, and is confined to sugar-coated pills, Brain-salt, Bromo-soda, and other granular preparations, and compressed goods. These are not shown under glass, *i.e.* not in a case, but in an open gallery of the elegantly labelled jars which are familiar to our readers. French pharmacy can boast of some good manufactures in the coated-pill line, but there is nothing in the Exhibition which approaches in finish or elegance Warner's sugar-coated pills. Mr. W. R. Warner, the senior partner of the firm, was at the Exhibition while one of our representatives was there, and that cirumstance enables us to give his portrait here. Mr. Warner is a hale and hearty man of 50, or thereabouts. As a pharmacist he is indebted to the Philadelphia College of Pharmacy for an excellent training, which, in combination with magnificent personal energy, has enabled him to create the reputation in America, Australia, and Europe which his house enjoys. The wholesale business was commenced in a small way at North Third Street, Philadelphia, in 1866, and ten years later the firm migrated to a large building in Market Street, which is now too small for them, so that other premises are at present in process of erection. Mr. Warner is a man who has made money and has taken care of it; yet he is as keen for business as ever, a fact which is probably accounted for by the circumstance that his two sons, William and Charles, are associated with him in the business.

SUNDRIES.

Fish glues are well represented in this section. Le Page's liquid glue is shown by the RUSSIA CEMENT COMPANY, Gloucester, Mass. The exhibit is a very large one, and really interesting, strange as that may seem, for the company have endeavoured to show the uses that liquid glue may be put to, and even that famous humourist, "Mark Twain," has been made to contribute to it, his adhesive page scrap-book figuring in the case. After all, the scrap-book is not a joke, but a very useful article. GEORGE UPTON, 239 Franklin

Street, Boston, Mass., also has a good exhibit of liquid fish glue, but we were more struck with the gelatine here exhibited, which we understand to be of marine origin. There is another exhibit of gelatine by J. & C. G. MacLeish, Buffalo, New York—"frozen" for cooking, and the clear variety for refining and other purposes. There is a small exhibit in the Court of turned wood and machine-made "square" boxes for pharmaceutical purposes. The latter are beautifully made with the strong herring-bone union. The manufacturers are E. B. Estes & Sons, New York. The best exhibit in the paint line is by H. M. Johnston, Brooklyn. This consists of patent dry sized kalsomine and fresco paints. It is claimed for these that they possess strong disinfecting properties, are ready for use by adding water only, can be applied with the greatest ease, and when dry present a smooth surface, which will not rub or scale from the wall. We were much struck with the exhibit of minerals by Mr. A. E. Foote, of Philadelphia, whose cute little son told our representative that his father had gone into minerals for the love of the thing, and became so noted for having rare specimens that he was always being pestered for "duplicates." That is a way hobbyists have. Edwards, the cobbler naturalist, was kept in poverty by the duplicate system. Mr. Foote stopped in time, and sells his "duplicates" now. It is worth while spending half an hour at his exhibit. No one who goes into the Court can miss it, for it is extensive.

A Petroleum Panorama.

This exhibit in which the United States has a large share, and which may by many be overlooked, is situated on each side of the Pont d'Iéna, at the Exhibition side of the Seine. There are two buildings, and they are connected by a covered gangway, which passes beneath the bridge. One of the buildings is a gigantic reservoir, beside which the huge champagne-tun in the Food Galleries is a veritable pigmy. The capacity of the reservoir is 25,000,000 litres, so that it looks not unlike an ordinary gasometer. It represents one of the storage vessels used in the petroleum fields, and is placed here as an object lesson of the magnitude to which the petroleum industry has reached. The reservoir is made of sheets of iron secured by rivets of lead, which enable it to be rapidly put together or dismounted; as, at the close of the Exhibition, it is to find a permanent resting-place at the factory of Luciline, at Rouen-Quevilly.

The interior of this strange edifice is divided into two floors; on the ground one is arranged an interesting collection of apparatus, models, and specimens illustrative of the petroleum industry. Here may be seen the boring instruments—the literal agents which have "struck ile" to many a fortunate individual on the other side of the Atlantic—a model of the celebrated Derrick, mode's of petroleum-tank steamers, the sets of apparatus used by the chemical analysts at the petroleum fields, the latter including Henninger and Le Bils' fractionation apparatus, and Fairbank's density apparatus, which consists of a tiny wooden barrel suspended on a balance-beam, the weight-end of which is graduated. There are many specimens of petroleum products, beginning with the oil as it comes from the earth, and passing through all the varieties for illuminating and lubricating purposes to the delicate vaseline oil used in perfumery for the extraction of flower odours, and the white "vaseline" used in medicine. Petroleum barrel-ends are a strange but effective and useful set-off to these things, as they show how many are the varieties which come into the market. At the other side of the reservoir we have the solid elements of petroleum—a stroke of irony being imparted by the exhibition of a huge stone which was projected 1,500 feet into the air by a jet of oil. This happened in Baku, we believe. There is some good ozokerite beside this from Galicie. It is from this earth-wax that cerasin is made, there being yellow and white varieties of that purified product. It is not so crumbly as the paraffin made from shale and petroleum. Refined paraffin in scale, block, pyramid, and candle form are also shown. All this is very interesting, but those who have visited this unique exhibit will agree with us that the contents of the first floor surpass it in magnificence. Here are shown plans, water-colour drawings, and photographs of the establishments in France, Spain, America, Austria-Hungary, and Russia, in which MM. Deutsch, the originators of the exhibit, have a direct interest. A still more attractive picture is reached by mounting a few steps to the platform of the first floor, where two panoramic views of American and Russian petroleum fields, painted by M. Poilpot, are hung in the fashion of, and with similar effect to, Phillipoteaux's "Niagara." The regions which are represented differ remarkably in character. The new district of Washington, which is the scene of the American picture, is a richly wooded country, glorious with colour. The buildings and machinery in the picture tell us that America is in the iron age. The men have a free-like aspect about them—everything shows that the earth's product has showered its benefits all around. The Caucasian panorama is a marked contrast to this. The scene is the plains of Balachané, Baku, a bleak and bare district, reeking of petroleum vapour and dense clouds of smoke, which add to the weirdness of the aspect. Camels ridden by military looking men help to animate the picture, but it is sorry animation, and the ghastly lagoons of petroleum quite neutralise it. The extent of the plains of Balachané is 25 kilometres square, and although the working district is small compared with the petroleum regions of the United States, its richness far surpasses it, so that as much as 30,000 to 40,000 barrels of oil can be turned out per day. Baku petroleum is refined at Ville Noire, to which it is conveyed by pipes and tank-waggons. Here it undergoes a process of refinement similar to what is followed in America, and from Ville Noire it is sent into Russia by way of the Volga, much of it going to Batoum by the Transcaucasian Railway, where the tank-steamers receive it for transportation to various parts of the world. How long this will last it is difficult to tell; there are signs that the natural sources in Baku are on the way to emptiness, whereas the American fields show no sign of exhaustion, and the manner in which the outlet is controlled favours a continuance of the supply. It would be a most serious thing to the world if this source of "light" were failing us. Its use is universal: the hut of the Socotrine aborigine is lighted with it, and so are the palaces of kings. The second part of the petroleum exhibit, which is reached by the covered gangway, is really illustrative of the applications of the product. It takes us somewhat into the ironmongery line of business, but it is sufficiently interesting to chemists to justify a quarter of an hour's visit.

Salt Lake City boasts of a drug store which is 8 feet wide and over 100 feet long.

Cheating the Slot Machine.—Nearly everybody, says the *Oil, Paint, and Drug Reporter*, has seen in public places an upright and solemn-looking machine, which bears the legend: "Drop a cent in the slot and get"—a stick of gum or a few drops of perfumery. The machine has been the source of a golden harvest to the inventor. The storekeepers took kindly to it, as it required no constant attention and always took good care of the pennies poured into its little craw. At night the proprietor would go out and, unlocking the small door, contentedly take out and count his day's receipts. But it was not to remain thus. Some individual has devised a scheme to get ahead of the slot machine. It is simple and a big success, and it is based upon the fact that there are other things than one-cent pieces which may be dropped into the slot to make the chewing gum "bob up serenely." A storekeeper stood in his store one night recently, gazing in a satisfied way at the silent machine as it clicked away in answer to the summons of an army of small boys and a number of men. He smiled as he mentally calculated, "There goes enough to pay the gas bill for nearly a month. How the people take to it!" And he went back to write to the owner for another one to supply the demand. At 10 o'clock he opened the little side door to rake in the cents. Did his eyes deceive him or was he dreaming? Had he struck a solder factory or a tin-roofing establishment? He looked again. Then in a dazed sort of way he dumped the contents into a box he had brought for the purpose of carrying the money. He counted 190 pieces of lead, 6 pieces of zinc, 4 pearl buttons, an overcoat button broken in half, one piece of brass, a piece of tobacco, and last, but the most valuable of all, a 3-cent piece which some person must have put in out of a feeling of remorse after stealing about 25 cents' worth of gum by means of the lead racket.

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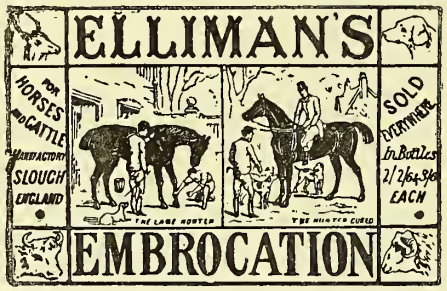

See First Page, facing inside of front of Cover, in this Issue for latest particulars.

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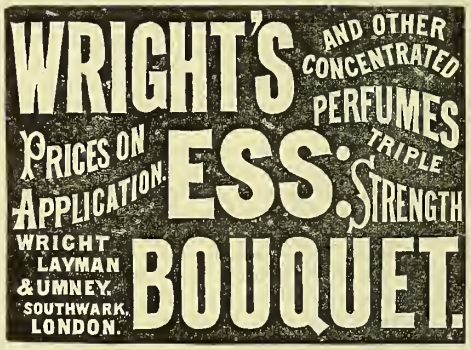

[2]

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See DIARY, 1889, Pages 17 and 18.

EDITORIAL NOTES.

THE IODINE TRADE.

JUST as everybody in the drug trade was meditating on the chances of a further drop in the price of this very difficult

product, a circular came from Mr. Greenhough, the broker who represents the combination in London, intimating that the price of iodine had been raised from 4*d.* to 9*d.* per oz. This was dated on Monday last, September 2. Somehow the impression had got about that this time the quotation was going to 2½*d.*, and a great many clever people had resolved to wait for that eventuality before stocking. Moreover the combination were refusing orders from brokers and speculators in certain instances. But, for all this, we know on the best authority that a very considerable quantity of iodine has been sold and delivered at 4*d.* to the legitimate trade, a welcome and not too frequent streak of luck in the well-skimmed business of chemical manufacturing.

With quotations again at what we may regard as the normal figure of 9*d.*, we naturally ask what are the prospects of stability. Of course it is well understood that the usual conditions of supply and demand have no influence on the price of this article; it is likely that iodine could be produced and placed on the market at a profit at 2*d.* per oz., perhaps even at less. The discovery of some new and extensive industrial use for iodine would be almost certain to result in a considerable fall in the price. This may be paradoxical, but it is about true. The producers in Chili and Peru could without much extra cost to themselves send ten times the quantity to Europe which now comes, and if it ever came about that the consumption depended on the price to any material extent, the existing convention would have to go. The vast and probably inexhaustible beds of nitrate of soda, which have been developed with such remarkable energy, especially of late, can furnish as a by-product whatever the world is likely to want in the way of iodine for centuries to come. The salt taken from those beds yields on an average some half per cent. of iodide and iodate of sodium; the world's consumption of iodine is estimated at an annual average of a quantity approaching, but under, 500,000 lbs. The Chilian producers limit themselves for the purposes of the convention to the supply of some 60 per cent. of the world's requirements. Anyone who knows anything of the present dimensions of the nitrate trade can easily calculate from the figures we have given what a self-denying ordinance this is, or rather would be if it were not for the compensating artificial price.

The recent action of the syndicate in reducing their quotation from 9*d.* to 4*d.* has been attributed in many quarters to a wholesome fear of Colonel North, the redoubtable Nitrate King. And it was doubtless in view of his possible intervention in the trade that buyers held aloof so much as they did. It was felt that if he and the feudatories whom he influences were resolved to sell iodine for what it would fetch it would be all up with the "ring." And so it would be; but for the present, at all events, this danger does not exist. Colonel North is just now a warm supporter of the convention policy, and declares himself resolved to abide loyally by its terms. What actually happened is said to have been that a certain nitrate producer, who had formerly been associated with the syndicate, sold his business, but, it seems, kept to himself a certain stock of iodine. This he shipped to London; it came into the hands of a firm of bankers, and by them was entrusted to Messrs. Lewis & Peat for sale .As we have already reported, fifteen kegs were sold publicly at 5*d.* per oz., and the rest of the consignment was disposed of privately. The question of interest to the trade is whether further consignments from outside producers are probable. Messrs. Lewis & Peat assure us that they have no knowledge at all on this point. "If iodine is sent to us to sell," says Mr. Figgis, "we shall get the best price we can for it, regardless of any combination." Mr. Greenhough, who represents the syndicate in London, seems quite confident that there is but little danger of fresh arrivals, and it is obvious that his principals have abundant means of knowing exactly all movements concerning iodine, and much power of influencing probable competitors. All the same the recent incident will set people thinking. The West Coast of South America is a big place, the nitrate business generally is one which cannot be read quite easily, and, lastly, the period for which the convention was last signed expires with this year. There are uncertainties, to say the least, on the horizon; and that is perhaps the only certainty in the business.

THE DOCK TROUBLES.

THE great dock strike, after having paralysed the commercial life of London for nearly three weeks, appears to be tending towards settlement through the virtual concession of the men's demands by the principal private wharfingers, and unless some fresh hitch occurs it is probable that before many days are over the dock companies will, with as much good grace as they can muster, decide to pay their labourers the same scale of wages as the largest of their competitors have now conceded. And the spirit of reasonableness which has now come over the negotiators also makes it likely that the grievances of the lightermen, without whose co-operation the return of the dock labourers would, in the long run, be of little use, will be settled in a manner more or less satisfactory to the strikers. Not only the City merchants, but everyone connected with the metropolis, will feel intensely relieved by the cessation of a strike which is causing incalculable loss to the port of London, and which, at one period, seriously threatened to permanently cripple its position. Every trade in London, and many branches of industry in the country and abroad, have felt the strain of the abrupt stoppage of the river traffic; the distribution of food products and of many staple articles, the free supply of which is a matter of vital concern to our industrial life, has been suddenly cut off; shipments of our manufactured goods to foreign customers suffer delay, orders have been cancelled, and consignments gone elsewhere; trade may have been permanently diverted from the metropolis—all because a handful of dock directors thought they saw in the spontaneous uprising of their sweated labourers the dreaded red spectre which must be defeated at all costs. "Our view of the strike," said Mr. Norwood, chairman of the dock directorate, to the deputation of shipowners who tried to act as mediators the other day, "is, that it is a dock strike now no longer. It is a blow aimed at capital and at general employment, an organised attack to raise the rate of remuneration for employment over the entire East-end of London." And then Mr. Norwood went on to accuse the strikers of the most outrageous intimidation, declaring that, but for their terrorism, the docks would have labourers in plenty on the old scale of remuneration. Now, a certain amount of undue pressure has, in all probability, been brought to bear upon some would-be labourers in isolated cases, and where such intimidation has beed discovered, the offenders have been promptly and rigorously punished, but the testimony of scores of independent witnesses is available to prove that the present strike, despite its magnitude, has been conducted in a more orderly manner and with less violence than any other great labour movement in history.

The dock officials have spread reports this week that men were gradually returning to work, and that it was only a question of a few days, when they would be able to again conduct their business with something like the accustomed dispatch. That there have been a few men at work in the

docks and on many private wharves is undoubtedly true, and during the present week, at any rate, deliveries of some of the lighter goods have been slowly filtering through, but the process has been so slow and uncertain as to be scarcely distinguishable from complete cessation of business. The drug trade has been comparatively less affected by the strike, perhaps, than any other of the produce trades. There was a fairly heavy stock of drugs in the hands of dealers all over the country; the Fenchurch Street warehouses, where a very large proportion of the supply in first hands is stored, have never stopped working throughout the strike, and the season is at present at its slackest; but yet the meagreness of the pretence that operations in the docks were in a fair way of resumption is proved by the wretchedly poor show of goods for to-day's drug auctions, nearly the whole of the supply offered being lots in second hand or stored at the Fenchurch Street warehouses. Of the new senna crop, for instance, the first large consignment, which arrived over a fortnight ago, is still lying in the ship's hold, and of the large and important consignments of other drugs of all descriptions—cinchona, rhubarb, benzoin, and so on—which have arrived since that date, none are available. The disappointments and trouble caused by this delay in obtaining goods will be rivalled only by the confusion which must result from the overcrowding of merchandise at the docks upon the cessation of the strike, and the immediate loss to the country in hard cash will be perceptible to some extent in a day or two, upon the publication of the Board of Trade returns for August. But the trouble has been even greater in the despatch of goods abroad than in the unloading of merchandise, and the export trade, except in so far as concerns goods which could be sent by rail and shipped from other ports than London, has been altogether suspended. Some firms in the drug trade have shipped goods for America by rail to Liverpool, and thence by steamer to New York; but this mode of forwarding is only possible in the case of highly priced goods, the railway rate on drugs to Liverpool being no less than 50*s.* per ton, while the former cheap through rate from London to New York, *viâ* Liverpool (which was, we believe, 25*s.* per ton), has been recently abolished.

But if the immediate losses caused by the strike are deplorable, the movement will at least have accomplished the excellent result of drawing universal attention to the blundering manner in which the business of the dock companies has been, and is still, conducted. In a concern upon the successful conduct of which the trade of the principal port in the world so largely depends habitual mismanagement is little less than criminal, and if one thing is more certain than another, it is that we shall lose the commercial pre-eminence which we still possess unless our antiquated and incompetent dock system be reformed root and branch. The history of the dock companies during the last thirty years has been one of uninterrupted waste of money and official extravagance. The building of enormously costly and almost useless docks, the carrying on of expensive lawsuits, and the fierce competition, which lasted for many years, between the various dock companies themselves and the private wharves, utterly exhausted the resources of the former, and when, last year, the East and West India Docks and the London and St. Katharine Docks amalgamated, and the present joint committee was created, both concerns were nearly on the verge of bankruptcy. Yet each of the two dock companies at that time maintained a board of forty directors—eighty altogether—though a joint board of seventeen is now apparently sufficient to guide the amalgamated concern. The immediate result of the amalgamation was a very considerable advance in the dock rates. Until the amalgamation, when an importer received a consignment of goods, the various private wharfingers and the dock companies would vie with each other in offering the largest discounts off their nominal scale of charges in order to secure the privilege of storing and handling the merchandise, the inevitable result being a cutting down of profits to the barest possible margin. After the amalgamation a uniform tariff was put in force, and has since been adhered to by the private wharves as well as the dock companies. The result has been a net profit of 234,806*l.* for the first six months' working of the joint concern, but this only admitted the payment of a dividend to the ordinary shareholders of the London and St. Katharine Docks at the rate of 1½ per cent. per annum, while the East and West India Dock shareholders received no dividend at all. The cause of the smallness of this payment is simply that the docks, through their own incompetence, their waste of money, the maintenance of ornamental rather than efficient staffs of directors and managers, and litigious proclivities, had become saddled with a capital of over 17,000,000*l.*, one-half of which, it is estimated, would have more than sufficed to provide and maintain proper dock accommodation for the port of London. When the dock labourers struck for an advance of wages from 5*d.* to 6*d.* per hour, the contention of the directors was that the concession of this demand would involve an extra outlay of 100,000*l.* per annum. This estimate was subsequently proved to be grossly exaggerated, and, while some calculations put the actual amount involved as low as 6,000*l.*, or even 5,000*l.*, per annum, the dock directors themselves now admit that the granting of the "dockers' tanner" would not cause an outlay of over 20,000*l.* to 30,000*l.*

Whether the strike will have the effect of permanently injuring the trade of London is a matter for conjecture, but we are inclined to believe that the raising of the status of the labourers, which will follow from the movement, and the fact that a sweeping reform of the London dock management has now been made inevitable, will at least balance the money loss to the community. The success of the London labourers will inevitably react upon the labour market on the Continent, and stimulate the tendency for improved pay and shortened hours which has been so perceptible in Germany, Belgium, and other Continental States during the last few years. Even the autocratic German Government recognises the power and the justice of the labour movement; and the German Emperor's contemptuous advice to the capitalists who came to complain to him about the demands of the striking miners, "*Oeffnen Sie ihre Taschen*" ("Open your purses, gentlemen"), was not given without reason.

A SLENDER HOPE.

LEGITIMATE chemists have been encouraged to hope that the "Interpretation Act," passed during the last session of Parliament, offers some prospect of an alleviation of the illogical condition of things which prevails in pharmacy, and under which an incorporated body of unqualified persons may, without hindrance, assume and use the title "chemist and druggist," which is forbidden to any of them individually. This arises, as is well known, from the circumstance that the courts held that the word "person," as used in the Pharmacy Acts, did not apply to a company, so that when the Pharmaceutical Society prosecuted a certain limited company for using the title and selling poison, the company's counsel successfully established the principle that the penal clauses of the Act which applied specifically to persons did not apply to companies. One of the sections of the Inter-

pretation Act provides that "in the construction of every enactment relating to an offence punishable on indictment or on summary conviction, whether contained in an Act passed before or after the commencement of this Act, the expression 'person' shall, unless the contrary intention appears, include a body corporate." The retrospective effect of the Act is very important, and would, of course, make it applicable to the Pharmacy Acts, if it were not for the words "unless the contrary intention appears." These render it very doubtful indeed whether any use can be made of the new Act pharmaceutically. The essence of the argument in the case alluded to was that the contrary intention did appear so palpably in the Pharmacy Acts that the courts must see that the legislature in passing those Acts had only natural and not artificial persons in view. For instance, it was argued that the person of the Pharmacy Act had to pass an examination, he might be elected on the Council, or he might leave a widow. How could a company satisfy these conditions? These arguments, used now with the words we have quoted specifically inserted, would have, we imagine, unanswerable force, and we can hardly expect that the Pharmaceutical Society, in its present reduced circumstances, will venture on a crusade against the companies in reliance upon a weapon of such uncertain character as this new Act would evidently be.

THE CONFERENCE.

LAST week we commented on a dozen of the twenty-five subjects upon which papers are promised to the Conference. Since then we have learnt that the communication by Mr. Thomas Maben on "New Gums of the Acacia Genus" will not be forthcoming, and it is of course doubtful whether the Committee will "pass" all that have been sent in. In any case it is quite certain that the programme will be a long one, and as the subjects are of a popular character, and are therefore likely to provoke good discussions, it is probable that the full time of the meeting will be usefully occupied.

Strophanthus. There are two papers on strophanthus, one of which, by Mr. Christy, will most probably deal with the commercial supply of the drug, while the other is on its chemistry, by Professor T. R. Fraser. Although both papers will differ widely as to character, they will in the ordinary course be discussed together. Professor Fraser has now been working on strophanthus for fully twenty years, and this is the first occasion, we believe, that he has come forward to address pharmacists on the subject. Recently he has commenced a *résumé* of the whole of his work, and has already, at the Royal Society of Edinburgh, given his present views on the botany, chemistry, and pharmacology of the drug, stating in regard to its chemistry the best means for separating strophanthin, and the characters and tests for that body. This is a subject upon which pharmacists require some information. Until recently strophanthin, although existing in the seeds to the extent of about 6 per cent., was regarded as a rare substance, a circumstance due probably to the difficulty of isolating it by the published processes. Even Hardy and Gallois, who are amongst the principal French makers of the glucoside, split it up during isolation, getting strophanthidin, the decomposition product, which differs very materially from strophanthin. The glucoside is now produced in large quantities and in fine condition in France, but the manufacture of it does not appear to have been taken up in this country.

Artificial Cold. Chloride of methyl, about which Mr. Martindale is to describe a new mode of application, has come much into use of late years for the production of local anæsthesia. Methyl chloride is a gas at normal temperatures, but it is easily liquefied, as the tension of its vapour is not high, and increases but slowly with rise of temperature. In the liquid state it boils at 23° C. below zero, so that it is a most efficient agent for producing low temperatures, and for this purpose has been used in the treatment of neuralgic affections. The chloride is supplied in strong metal bottles, from which it is liberated as a fine spray when a knob on the top is pressed. This spray is partly gas and partly liquid, the temperature of the latter being much below —23° C., owing to gasification of part of the chloride, and it is obvious that it will produce insensibility of that part of the skin to which it is applied. Methyl chloride is produced on a large scale in France from trimethylamine hydrochloride by simply heating it, the products being ammonia, free trimethylamine, and methyl chloride.

Euonymus. Mr. W. A. H. Naylor is to read a paper entitled "Chemical Observations on the Root Bark of Euonymus." Owing to the fact that this remedy is chiefly employed in the form of the eclectic resinoid euonymin, comparatively little attention has been paid to the bark by English chemists. The root bark is said to be preferred to the stem bark; nevertheless, the latter is official in the United States Pharmacopœia. Our chemical knowledge of the drug is unsatisfactory. There are several resins in it, asparagin probably, a peculiar acid (euonic acid), and several other unimportant things, about none of which is there anything definite known. We doubt not that Mr. Naylor will leave the subject in a more satisfactory state.

Easton's Syrup. In spite of the large encroaches on his time by the hundreds who are to visit Newcastle next week, the local secretary, Mr. Clague, is to communicate a paper on "Easton's Syrup." There is some difficulty in keeping this preparation; the ferrous phosphate oxidises and is thrown out of solution, and if the syrup is overloaded with quinine cold weather throws that out in hard crystalline form, which does not dissolve again with readiness. The syrup also becomes brown when it is kept long. Several experimenters have written about these and other points during the past year, with the result that there was an apparent agreement as to the cause of the changes. The pleasantly odorous wild cherry bark of Virginia is to be

Wild Cherry. the subject of a note by Mr. L. W. Hawkins. This drug was semi-officialised by the Conference last year, when the Formulary Committee gave syrupus pruni Virginianæ a place in the Unofficial Formulary. The drug is unquestionably destined to take a firm place in British therapeutics. It has long been held in high esteem in America, and during the past twenty years has been growing in favour here. It is one of the most valuable cough-mixture adjuncts that we have. Part of its value lies in the hydrocyanic acid which it yields, and that in largest quantity in the autumn (1·4 per mille), hence the direction by the Formulary Committee to use the autumn-harvested bark. We are not aware, however, of any precise information regarding the hydrocyanic strength of commercial bark and its preparations, and as the value of the remedy is diminished by this uncertainty, we hope that Mr. Hawkins will give some information on this point. Following this

Aërated Waters. we have a paper by Mr. J. Pattinson on "The Effect of Using Nitrous Vitriol in the Manufacture of certain Aërated Waters." The subject is not new to pharmacists. Five years ago Mr. Naylor had to trace the cause of the loss of pungency in some ginger ale, and he clearly demonstrated then that the sulphuric acid used to generate the carbonic-acid gas was contaminated with nitro-compounds, which had the effect of oxidising the pungent principles of ginger and capsicum.

The warning which Mr. Naylor then gave to aërated-water makers regarding the use of nitrous vitriol has evidently not been universally heeded, and so we have another paper on the subject by Mr. Pattinson. The ropiness in lemonade and other sweetened beverages which troubles some makers is probably also traceable to the same cause, as we have noticed the nitrogen element favours that condition. Somewhat allied to this subject is the paper which Mr. Richard Reynolds is to present, on "Negative Evidence of Lead in Drinking-water." Mr. Reynolds has not appeared in the capacity of a contributor for some years, and the Conference is sure to give him a good reception on this occasion, especially in view of the meeting at Leeds next year. His subject has become of greater importance recently owing to the alarming epidemics of lead-poisoning through water-supply in the Midlands. The detection of lead in these cases is not a matter of great difficulty, but it may be said that the sulphuretted hydrogen, chromate and logwood tests are not all that could be desired. Mr. H. W. Jones's paper on "Hypophosphorous Acid as a Solvent for Morphine and Strychnine" promises to give pharmacists information on a matter of which nothing is known at present. Extract of stramonium, upon which Mr. A. W. Gerrard is to speak, is a little-used medicine, made in an old-fashioned way, and, although undoubtedly potent, since the seeds contain about 1 per mille of daturine, the exact potency is unknown. The pharmacopœial method of manufacturing the extract is surely amenable to improvement. Mr. Gerrard has already done excellent work on the medicinal atropaceous plants, and we regard his forthcoming paper as an addition thereto. We understand that the Formulary Committee will not present a report next week, so that the communications which have been mentioned will form the discussable pabulum of the meeting, the President's address being, by well-established custom, beyond criticism.

Lead in Water.

Stramonium Extract.

More Papers.

Since the foregoing was written we have been informed by the secretary that eight more papers have been promised, thus bringing the number to be read up to thirty-two. This is too many, for the time available will be less than fifteen minutes to each, but it is gratifying as showing the vitality of the Conference. Mr. T. P. Blunt is to speak on a "Volumetric Process for the Assay of Ipecacuanha," and this will enable three papers to be discussed together. The volumetric method of estimating alkaloids is open to many objections, such as, for instance, in the case of Mayer's solution, the uncertainty of complete reaction in presence of acetic acid; but there are equal objections to gravimetric methods when the yield of alkaloid is small. Mr. R. Wright is to communicate three papers—(1) On "The Strength of Commercial Specimens of Scheele's Prussic Acid"—we wonder if he has found a single one containing 5 per cent.? (2) on "The Relative Value of Alcohol and Chloroform, and Mixtures of the Two, for the Extraction of Aconite and Belladonna Roots," and (3) "An Impurity in a Commercial Sample of Sodium Salicylate"—this will doubtless lead to a discussion on the relative merits of the natural, the dialysed, and the ordinary products. "Arsenic in Glycerine," a second paper by Mr. L. Siebold, will enable the Conference to judge to what extent this reputed contaminant exists in commerce. The case or cases observed have surely been accidental. Mr. T. H. Williams is to read a note on lemon juice, which should be valuable considering the experience which he has had in handling the article. We have met with specimens of the juice which contained sulphurous acid, owing apparently to the ignorant proceeding of adding bisulphite of lime to preserve it. Mr. B. S. Proctor is to contribute a fourth paper on "Tannin; its Solubilities, &c." The commercial article is very variable, but it may be divided into two classes—"spirit tannin" and "ether tannin." The latter is preferred as a medicinal agent, being lighter and more soluble. In regard to solubility there is some confusion in the books; a newly published one gives it as 1 in 6, whereas Mr. Maben four years ago showed that 1 in 1 to 1 in 3 were the limits. Lastly comes Mr. D. B. Dott with a paper on "Narceine and its Salts." This alkaloid was at one time supposed to be a valuable soporific, more akin in its action to morphine than any other of the opium alkaloids. Claude Bernard, for example, had excellent results with doses of a fraction of a grain, but recent experiments show that 5 grains are required to produce sleep. Probably the earlier results were due to contamination of the narceine with morphine; if so, the chemistry of the alkaloid may be at fault, as much of what we do know about it has come down to us from past generations.

Lessons in Protection.

The workings of the protectionist mind are inscrutable. It is difficult to perceive how our fellow-subjects at the Antipodes can watch the comical struggles for more or less protection among interested parties without recognising that the one purpose of all is to get the greatest possible share of plunder out of the community. Here, for instance, are specimens of the reports of some of the deputations waiting upon the Commissioner of Customs when the Revenue Bill was being discussed this year. The bottle-makers had got in a proposal to increase the duty on soda-water bottles from 2*s.* to 4*s.* 6*d.* per gross. Thereupon representatives of the aërated-water industry urged that the old duty was ample. There was a proposal to reduce the duty on manufactured cork. This is now 4*d.* a lb. Of course there appeared a deputation of cork-cutters, who tried to convince the commissioner that free trade in corks would be a ruinous policy. The brush-makers followed with an appeal for the duty on brushes to be raised from 25 per cent. to 50 per cent. Then came some confectioners, who declared that the 2*d.* per lb. on confectionery was not sufficient to encourage them to make their fortunes. Some curious representatives of the public apparently asked for the abolition of the duty of 2*d.* per tin on condensed milk. They said the Victorian condensed milk was not good. This was contradicted by a counter deputation, and the commissioner declared that the green pastures of the colony ought to be good enough for Victorians, and gave no hope of free competition in this article. The commissioner's own innermost opinion of the patriotic disposition of the gentlemen who wait upon him would be interesting.

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Trustees' Risks.

A meeting of creditors in the London Bankruptcy Court last Tuesday served to illustrate one of the many pitfalls in the law of bankruptcy, and to show the risk run by unwary trustees under private deeds of assignment "for the benefit of creditors." An Essex auctioneer last December executed one of these deeds of assignment, and the trustee nominated under it, Mr. Alfred Cass, an accountant of Bishop's Stortford, realised the estate. He was proceeding forthwith to declare a dividend, but he had reckoned without his host, as a creditor, dissenting from the course which he had pursued, moved for and obtained a receiving order against the estate. Thereupon Mr. Cass was compelled to stay his hand; he no longer had any legal right to deal with the estate, and the Official Receiver promptly required an account of all that had been done and a surrender of all moneys received. There was, of course, no difficulty in complying with these orders; but it was not until the first meeting of creditors that the unfortunate trustee realised that after all he had been engaged on a labour of love. His claim for costs and remuneration was ruthlessly rejected by the Official Receiver, who added the consoling information that had it not been that the estate had been satisfactorily realised, Mr. Cass would have been liable for the full value of the assets when he took them over. The trustee was likewise told that his only remedy was against the creditors under whose instructions he acted.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 Cannon Street, E.C., September 5.

THE auctions were very small to-day, owing to goods of new import not having been landed or sampled, proceeding, generally speaking, without much change, ipecacuanha being lower. Musk is firmly held, cardamoms rather dearer for better qualities, vanilla irregular. Rhubarb sold well, and other goods unchanged. The chief event this week was the rise in iodine, the price of which was raised on Monday from 4*d.* to 9*d.* per oz.

Acid (Carbolic).—Liquid 50-per-cent. at 10*d.*, and 97-per-cent. at 1*s.* 5*d.* per gallon, casks free. No change.

Acid (Citric).—Very quiet; 1*s.* 3½*d.* to 1*s.* 3¼*d.* per lb. for spot, and at 1*s.* 4*d.* per lb. nominal for forward delivery. We have not heard of anything sold at 1*s.* 3¼*d.* this week.

Acid (Oxalic).—Nothing much doing at 4½*d.* per lb.

Acid (Tartaric) rules still at 1*s.* 2¾*d.* for English, and at 1*s.* 2½*d.* for foreign.

Aconite (Japan).—Twenty bags, usual good quality, per *Nerissa viâ* Hamburg, were taken out, no bid having been made.

Aloes.—*Cape*: Of 15 cases 5 sold at 21*s.* per cwt. for fair hard, bright, and slightly drossy, the remainder bought in at 27*s.* per cwt. for various qualities. *Curaçao*: 71 boxes, 2 half-boxes, and 176 gourds, nearly all sold; fine livery, in boxes, at 85*s.* to 90*s.*; good livery at 75*s.* to 80*s.*, and fair at 35*s.* to 49*s.*; good fair livery in gourds at 57*s.* 6*d.* to 67*s.* 6*d.*; fair at 47*s.* 6*d.*, and lower at 25*s.* *East India*: 50 packages bought in, good Socotrine, in kegs, at 5*l.* to 5*l.* 10*s*, and soft middling Zanzibar at 60*s.*

Ambergris.—Three tins bought in, one weighing 60 oz., of black undeveloped, fair-flavoured quality, at 30*s.*, and two, together about 36 oz., fine grey, at 200*s.*, for which 170*s.* is asked.

Ammonia Salts.—Carbonate at 3½*d.* to 3¾*d.* per lb. Salammoniac at 36*s.* per cwt. for first and at 34*s.* per cwt. for second, both crystals. Sulphate quiet at 12*l.* 3*s.* 9*d.* for grey 24-per-cent. in London, and at 12*s.* 5*s.* for Becton terms, at 12*l.* 1*s.* 3*d.* to 12*l.* 2*s.* 6*d.* for Hull, and at 12*l.* 3*s.* 9*d.* for Leith.

Anise.—Russian, nominal at 19*s.* per cwt.; Spanish, at 25*s.*; Italian, at 30*s.*; and Chinese star, at 75*s.* to 80*s.* per cwt.

Annatto.—Seed: 9 packages, 5 of which not landed, and 4 cases, from Ceylon, not drawing any attention, were taken out, no price being mentioned. Roll: 15 baskets, imported *viâ* New York, of good colour, bought in at 1*s.*

Antimony.—Star regulus is worth 66*l.* to 67*l.* per ton.

Areca Nuts.—Five bags good sold at 21*s.* per cwt.

Arsenic.—Firm, at 13*s.* to 13*s.* 3*d.* per cwt. landed terms for best white powder.

Balsams.—Canada is worth 1*s.* 9*d.* to 1*s.* 10*d.* per lb. Copaiba in sale to-day, consisting of 6 casks and 15 cases, were bought in at 2*s.* 3*d.* to 2*s.* 4*d.* for Maranham, and at 2*s.* 3*d.* to 2*s.* 4*d.* for Pará, except 1 cask thick Maracaibo lying in Liverpool sold at 2*s.* Peru: 14 cases and 1 tin settlings bought in at 3*s.* 10*d.* to 4*s.* 3*d.*, except 2 cases good sold at 4*s.*

Benzol lower, at 3*s.* 1*d.* to 3*s.* 2*d.* for 90 per-cent., and at 2*s.* 4*d.* for 50-per-cent.

Bleaching-powder steady, at 7*l.* 15*s.* to 7*l.* 17*s.* 6*d.* ex-warehouse London, and at 6*l.* 15*s.* to 7*l.* 2*s.* 6*d.* on the Tyne.

Borax quiet, at 28*s.* to 30*s.* per cwt., according to make and quantity.

Buchu.—For 17 bales in sale to-day a bid was made of 1½*d.* per lb., but this was refused, and the whole bought in at 2½*d.* to 3*d.* per lb. for fair green to good green leaf.

Cajaputa Oil.—Ten cases offered, and 5 sold, 24 bottles each, at 3*s.* 6*d.* per bottle.

Calabar Beans.—Small sales in Liverpool at 7¼*d.* per lb.

Calumba.—135 bags offered, and nothing sold; fine washed and picked bought in at 45*s.* per cwt. (35*s.* bid and refused), bold dull and bright mixed at 17*s.*, and part wormy and broken at 16*s.* There is no demand whatever for this article just now.

Camphor (Crude).—Not quite so firm, at 105*s.* per cwt. for Japan, and at 102*s.* 6*d.* per cwt. nominally for China.

Camphor (Refined).—Bells at 1*s.* 3½*d.* to 1*s.* 4*d.* per lb., according to make; tablets at 1*s.* 4*d.* to 1*s.* 7*d.* per lb.

Cantharides at 3*s.* 7*d.* per lb. c.i.f. for Russian, being lower, and there is no change in the value of Chinese. Two cases of good Russian in sale to-day bought in at 4*s.* 3*d.* to 4*s.* 6*d.*

Cardamoms.—Of 113 packages of a poor assortment 49 sold. Ceylon Malabar, fairly heavy, mixed pale and brown, at 1*s.* 5*d.* to 1*s.* 8*d.* per lb.; smaller ditto at 1*s.* 4*d.*, partly open and shelly ditto at 1*s.* 2*d.*, and pickings at 10*d.* Mysore, good pale bold, at 3*s.* 2*d.*; medium size at 2*s.* 1*d.* to 2*s.* 3*d.*, sea damaged and repacked at 1*s.* to 1*s.* 3*d.*, and seeds at 1*s.* 6*d.* Tellicherry, light and small, at 3*d.*, and shells at 1*d.* per lb. Mangalore, rather brown, shelly, and light, bought in at 2*s.* 4*d.*

Cascara Sagrada.—Unchanged on the spot, at 8*d.* per lb. nominally, and for forward delivery any reasonable bid would no doubt be cheerfully accepted.

Cascarilla Bark.—Thirty bales of very thin and part woody quality remained unsold, a bid of 21*s.* 6*d.* not having been accepted.

Castorum.—Four kegs, one each of seconds, the one rather mouldy, and the other dry lean, and the same of pickings, the whole being bought in at 36*s.*; no bid.

Chamomiles are still dropping in price, Belgian flowers of good pale quality being now worth 47*s.* 6*d.* per cwt., and slightly inferior 42*s.* 6*d.* per cwt.

Cinchona.—194 packages of druggists' offered, and 89 sold. Guayaquil, sound, fair to good long thin quill, at 6*d.* to 1*s.* 2*d.* per lb., and more or less damaged at 1*d.* to 11½*d.* Huanoco sound at 9*d.* to 1*s.* per lb., and more or less damaged at 4½*d.* to 6*d.* per lb. Loxa, fair to good sound, at 1*s.* to 1*s.* 11*d.*, and more or less damaged at 11*d.* to 1*s.* The remainder bought in, Guayaquil, mark O, at 7*d.* to 1*s*; OO at 8*d.* to 11*d.*; and OZ at 1*s.* 9*d.*

Civet.—Of 13 horns of good fair quality 4 sold at 8*s.* 6*d.* The remainder bought in at the nominal prices of 9*s.* to 10*s.*

Coca Leaves.—Twenty-five cases small broken Batavian leaf, 17 of which, of good green colour, were sold at 8*d.* to 9*d.* per lb., and 8 cases mixed discoloured at 7*d.* to 7½*d.* The cases weigh about 18 lbs. each net.

Cocoa Butter.—The 400 cases Cadbury's offered at the monthly auctions on Tuesday were all sold at 1*s.* 0¾*d.* to 1*s.* 0⅞*d.* and 1*s.* 1*d.* per lb., as well as 21 tons of Cadbury's cocoa shells at 90*s.* for A, at 75*s.* to 77*s.* 6*d.* for B, at 92*s.* 6*d.* to 95*s.* for C, and at 10*l.* 12*s.* 6*d.* to 10*l.* 15*s.* for D quality; but no sales for cocoa proper were held on that date.

Cod-liver Oil.—Thirty one casks Norwegian bought in at 65*s.*

Copper (Sulphate) lower, at 23*l.* 5*s.* to 23*l.* 10*s.* on the spot, and at 21*l.* 10*s.* to 21*l.* 15*s.* for forward delivery.

Cream of Tartar slow, at 90*s.* to 90*s.* 6*d.* per cwt. for best white French crystals.

Cubebs.—Twelve bags in sale to-day of fair quality

berries, but rather stalky and dusty, bought in at 24*l.* 10*s.*, and open to a bid.

CUMIN SEED.—Of 32 bags Malta, 20 taken out, and the remainder bought in at 23*s.* for fair seed, 22*s.* per cwt. being the limit.

CUTCH very quiet. Double eagle at 28*s.* per cwt., Cock at 26*s.* 6*d.* per cwt. re-weights, Star B at 27*s.* 9*d.* per cwt., MM slabs at 27*s.* per cwt., RS tablets at 28*s.* 6*d.* per cwt., RS slabs at 22*s.* 6*d.* to 23*s.*, and RS block at 24*s.* to 25*s.* per cwt. There were offered in sale the day before yesterday 26 cases, and sold at 20*s.* 6*d.* for sound middling block, and at 12*s.* to 18*s.* for sea damaged.

DRAGON'S BLOOD.—Seventeen cases printed, 6 of which could not be landed owing to the strike, and of the remainder 4 cases sold without reserve, at 80*s.* to 82*s.* 6*d.* per cwt. for rather bricky fingers in reed; 7 cases of ordinary block bought in at 70*s.*

DYE-WOODS.—In London, *Fustic*, 3*l.* 10*s.* to 5*l.* for Jamaica, &c. *Limawood*, 9*l.* to 10*l.* *Logwood*, 6*l.* to 6*l.* 15*s.* for Jamaica; 6*l.* to 8*l.* for San Domingo; 8*l.* 10*s.* to 8*l.* 12*s* 6*d.* for Honduras, and for Campeachy 8*l.* 10*s.* to 10*l.* 5*s.* *Sapanwood*, 8*l.* to 10*l.* *Red Sanders*, 5*l.* to 5*l.* 5*s.* All according to quality and quantity.

ERGOT OF RYE is now quoted 1*s.* 2*d.* per lb. c.i.f. for Russian; and at this day's auctions there were offered 9 bags, 5 of which taken out, and the other 4 of very wormy and bold Spanish were sold without reserve at 1*s.* 0½*d.* per lb.

FENUGREEK SEED.—In moderate request, at 6*s.* 9*d.* to 7*s.* for Mogadore.

GALLS (CHINA).—Some more sales have been made at 70*s.* per cwt., and a further upward movement is still predicted, but is hardly probable.

GALLS (TURKEY).—Their position has not changed since our last report, at 42*s.* 6*d.* to 45*s.* per cwt. for white Bassorah, 49*s.* to 50*s.* per cwt. for green ditto, and 54*s.* to 55*s.* per cwt., for blue; good selling at the latter figure. The 7 bags ordinary green in sale to-day bought in at 50*s.*

GAMBIER has risen considerably for arrival since our last report; July-August steamer shipment at 30*s.* per cwt., August-September at 29*s.* 3*d.*, September-October at 29*s.*, spot at 31*s.*

GAMBOGE.—The 21 cases were offered to-day to willing buyers, of which 18 fetched the following prices:—Good pipe, partly broken and blocky, at 10*l.* 12*s.* 6*d.* to 10*l.* 15*s.*, fair and more broken at 10*l.* to 10*l.* 2*s.* 6*d.*, middling blocky ditto at 9*l.* 15*s.* to 9*l.* 17*s.* 6*d.*, and good pickings at 9*l.* 10*s.* to 9*l.* 15*s.* per cwt.

GLYCERINE is still to be had at 63*s.* for double-distilled s.g. 1·260.

GUARANA.—Two cases good fair bought in at 4*s.*, 3*s.* 9*d.* per lb. being its value.

GUM AMMONIACUM.—Two cases fine pale drop, mixed with siftings, sold at the good price of 41*s.* per cwt.

GUM ARABIC.—Of 115 packages of various descriptions, 7 sold at 50*s.* per cwt. for good frosted, partly small Australian; at 40*s.* per cwt. for fair pea-size Cape siftings; at 80*s.* for clean soluble, nameless, siftings. Picked Kurrachee Amrad bought in at 5*l.* 5*s.* per cwt., and various lots of bleached picked gum at 9*l.* 10*s.* to 13*l.*

GUM BENJAMIN.—Of 201 cases Sumatra, Palembang, and Penang, and 16 cases Siam, 70 sold of the former, and 12 of the latter; good fair second Palembang at 55*s.*; fair third Palembang (29 cases) sold before the auctions, low half false-packed third Penang at 47*s.*, dark ordinary second Sumatra at 5*l.*, and low second Sumatra ⅔ false-packed at 62*s.* 6*d.* to 72*s.* 6*d.* Siam dull; almondy block at 12*l.* 15*s.* to 13*s.*, and fair ditto at 13*l.* 5*s.* to 13*l.* 10*s.*

GUM ELIMI.—Eight cases bought in at 38*s.* to 40*s.* for slight yellow to good white, 37*s.* 6*d.* having been bid, and refused, for the better quality.

GUM GALBANUM.—One barrel offered to-day, and the article being scarce it was bought in at the high figure of 20*l.*

GUM KINO.—Seven cases good bright Cochin bought in at 30*s.*; no bid was made for it.

GUM MYRRH.—Forty-four bales Aden sorts offered, and 17 sold before the auctions; 5 at 85*s.* per cwt. sold in sale for fair but dusty quality.

GUM OLIBANUM.—Two cases clean pea-size siftings bought in at 45*s.* per cwt., 40*s.* being the limit.

GUM THUS.—Six casks of fair quality bought in at 18*s.* per cwt.

GUM TRAGACANTH.—Three bags of Hog offered in sale to-day were of no interest, but as far as the market for leaf is concerned, it is as firm as it possibly can be, higher prices being asked for seconds, and so on.

HONEY.—Sixty casks offered and 20 Jamaica sold at 26*s.* to 29*s.* 6*d.* per cwt. for fair to good quality; Chilian bought in at 30*s.* per cwt.

INDIGO.—The business done has been very small for the last three weeks, partly owing to the strike here, and partly owing to very favourable reports received concerning the growing crop from the producing districts.

INSECT FLOWERS.—Two bales Dalmatia of open flowers sold at 70*s.* per cwt.; the biddings commenced at a very low figure indeed.

IODINE.—The agent of the Convention announced by circular on Monday that the price was advanced to 9*d.* per oz. We are told that a large quantity has been supplied to regular customers at the rate of 4*d.*, but we hear complaints of refusals to sell from many quarters.

IPECACUANHA.—Forty-three packages were brought under the hammer to-day, and 19 sold at a reduction of about 2*d.* to 3*d.* on some of the damaged qualities. The prices realised are 6*s.* 8*d.* to 6*s.* 9*d.* per lb. for fair sound root; first-class damaged, 6*s.* 7*d.*; second-class damaged, 6*s.* 1*d.* to 6*s.* 6*d.*, according to quality; third-class damaged, 6*s.* to 6*s.* 2*d.* per lb.

ISINGLASS.—The sales on Friday, August 30, went off irregularly, prices having declined for Bombay and West India, and gone up for Penang, Cape and Saigon, Brazil being steady, The next auctions are fixed for September 24. Of 369 packages (about two-thirds the quantity at the previous auctions) a good proportion sold. *Brazil*: Pará lump from 2*s.* to 2*s.* 3*d.* for second and third piles, tongue at 1*s.* 9*d.* to 2*s.* 1*d.*; Maranham lump at 1*s.* 6*d.* to 1*s.* 11*d.*, tongue at 1*s.* 1*d.* to 3*s.* 3*d.* per lb. *West India* lump at 1*s.* 9*d.* per lb. Saigon leaf at 4*s.* to 6*s.* per lb., according to quality. *Penang* round leaf at 1*s.* 8*d.* to 4*s.* 2*d.* per lb. for pickings to fine smooth, cake from 11*d.* to 1*s.* 4*d.*

JALAP is worth 7*d.* per lb.

MATICO.—Fifteen bales of direct import, and of unsightly quality, part mixed with doubtful leaves; no bid, and bought in at 5½*d.* to 6*d.*

MENTHOL CRYSTALS.—Six cases good fine white bought in at 4*s.* 9*d.* per lb., each case containing 6 tins of 5 lbs. each.

MERCURIALS.—Calomel is quoted 3*s.* 7*d.* per lb.; corrosive sublimate, 2*s.* 11*d.*; red precipitate, 3*s.* 9*d.* to 3*s.* 10*d.*; white precipitate, 3*s.* 8*d.* to 3*s.* 9*d.*; and English vermilion, 3*s.* 2*d.* per lb.

MOSS (IRISH).—Twenty bales of fair quality bought in at 18*s.* per cwt.

MUSK.—Thirty packages offered, amongst which Tonquin, pile 1, small to bold pods, thin part blue underskin, slightly damp, bought in at 95*s.*, the price being 90*s.*; pile 1, small to bold pods, usual skin, well trimmed and fairly dry, bought in at 85*s.* A similar parcel, slightly damp (5 tins), sold at 82*s.* 6*d.* per oz. Pile 3, small to boldish pods, thin part blue underskin, good shape, damp, and all false packed, 49*s.* bid, and bought in at 60*s.* Good thin-skin Russian Cabardine bought in at 27*s.*; usual Russian Cabardine, skinny, with hair, fairly dry, bought in at 22*s.* Skins and trimmings sold at 1*s.* 3*d.*; ordinary Nepaul grain bought in at 27*s.* 6*d.* Demand rather limited to-day.

MYROBOLAMS.—2,010 bags were bought in on Tuesday, at 9*s.* for good Coconada, and at 9*s.* 6*d.* for good Bombay. Private sales at 6*s.* 3*d.* to 6*s.* 6*d.* for middling to fair Madras.

NUX VOMICA.—In sale to-day there were offered 22 bags, 15 of which were bought in at 11*s.* for fair bold, and the others sold, fetching 3*s.* 6*d.* to 4*s.* 6*d.* for low and not much better than sweepings.

OILS.—Almond oil, expressed at 1*s.* 6*d.* per lb., essential at 28*s.* per lb.; clove oil at 4*s.* 6*d.* per lb.; Pimento at 15*s.* per lb.

OIL (CASTOR).—Italian quiet at $5\frac{1}{4}$*d.* per lb. Calcutta continues very firm in Liverpool at $3\frac{5}{8}$*d.* per lb. for good seconds, and in London at $3\frac{3}{4}$*d.* per lb. for the same quality. 100 cases Calcutta firsts in sale to-day bought in at $4\frac{1}{4}$*d.* per lb.

OIL (ESSENTIAL).—Star-anise, 5*s.* 10*d.* to 5*s.* 11*d.* per lb. on the spot, and 5*s.* 6*d.* to 5*s.* 7*d.* per lb. for arrival. Cassia oil, 3*s.* 4*d.* to 3*s.* 5*d.* per lb. Citronella, $\frac{5}{8}$*d.* to $\frac{11}{16}$*d.* per oz. Lemongrass oil, $1\frac{5}{8}$*d.* per oz. Ginger-grass oil, $1\frac{1}{2}$*d.* to $3\frac{1}{2}$*d.* per oz. American peppermint oil, Hotchkiss H.G., 11*s.* 9*d.* to 12*s.* per lb. In sale to-day 8 cases cinnamon oil; 1 case sold before the auctions, and the remainder was bought in at 1*s.* 6*d.* to 2*s.*, a bid of 9*d.* being refused. Eight cases Japan peppermint oil bought in at 2*s.* 10*d.* per lb.; 2 cases American Mitcham peppermint oil bought in at 16*s.* per lb.; 1 case nutmeg oil bought in at $5\frac{1}{2}$*d.* per oz., 4*d.* bid and refused; 2 cases Fisher's patchouly oil bought in at 1*s.* 6*d.* per oz.; and 7 cases Fisher's citronella oil, $1\frac{3}{8}$*d.* per oz.

OILS (VARIOUS).—*Cocoanut* oil steady; Ceylon pipes, spot at 24*l.* 7*s.* 6*d.* to 24*l.* 10*s.*, Cochin at 27*l.* 10*s.* to 28*l.*, Mauritus at 24*l.* 15*s.* to 24*l.* 17*s.* 6*d.* *Cotton-seed* at 23*l.* 15*s.* for crude on the spot, and at 26*l.* 10*s.* to 27*l.* 10*s.*, according to make and packages; December-April, ordinary at 24*l.* 15*s.*; Hull refined spot at 24*l.* 12*s.* 6*d.* for naked; crude spot at 22*l.* 10*s.* *Linseed* oil firmer; spot at 21*l.* 12*s.* 6*d.* to 21*l.* 15*s.* waterside in pipes; land at 21*l.* 15*s.* to 21*l.* 17*s.* 6*d.*, and in barrels at 21*l.* 17*s.* 6*d.* to 22*l.*; September-December at 21*l.* 5*s.* to 21*l.* 7*s.* 6*d.* *Olive* oil, 35*l.* for Spanish, 35*l.* for Messina, and 33*l.* to 33*l.* 10*s.* for Mogadore. *Palm* oil, no change; fine Lagos at 25*l.* 17*s.* 6*d.* to 26*l.* *Petroleum* continues very quiet; American spot at $5\frac{5}{8}$*d.* to $5\frac{7}{8}$*d.*, according to brand and terms; September-December at 6*d.*; Russian spot at $5\frac{9}{16}$*d.* to $5\frac{11}{16}$*d.*; September-December at $5\frac{7}{8}$*d.* *Rape* oil, not much doing on the spot; refined English at 32*l.* to 32*l.* 5*s.*; brown, 30*l.* 10*s.* September-December, 29*l.* 15*s.* *Turpentine* firm; American spirits, spot 35*s.*; September-December, 33*s.* 6*d.*, and January-April, 34*s.* to 34*s.* 3*d.*

ORANGE PEEL.—Fifty packages thin and thick cut all bought in at 9*d.* to 1*s.*, except 7 casks thick-cut sold at $5\frac{1}{2}$*d.* per lb., and 5 bags thin-cut at 8*d.*

PATCHOULY LEAVES.—Twenty-six bales offered, 10 of which, of good leaf but rather dusty, and 10 very stalky, all bought in at $7\frac{1}{2}$*d.* and $4\frac{1}{2}$*d.* per lb., and a little less would be taken for either of them.

POTASH SALTS.—Bichromate is firm at 4*d.* per lb. Chlorate, no change, at $4\frac{1}{2}$*d.* to $4\frac{5}{8}$*d.* per lb. on the spot. Prussiate in very little demand, foreign at 7*d.* and English at $7\frac{1}{4}$*d.*

QUICKSILVER has remained the same in importers' hands, viz. 9*l.* 15*s.*, but second-hand lots have been sold at 9*l.* 7*s.* to 9*l.* 8*s.*

QUININE.—At the beginning of the week 5,000 oz. German were done at 1*s.* $2\frac{1}{4}$*d.*, and since then 10,000 oz. were sold at 1*s.* 2*d.*, both for December delivery.

RHUBARB.—Of 78 cases in sale, 27 sold as follows: Shensi, bold round orange-coated, slightly rough, $\frac{1}{2}$ pinky, $\frac{1}{2}$ dark fracture, at 2*s.* 3*d.*; small round, fairly good pinky fracture, at 2*s.* 3*d.* to 2*s.* 4*d.*; small round and flat, darkish fracture, at 1*s.* 5*d.*; medium, $\frac{3}{4}$ pinky, $\frac{1}{4}$ dark fracture, at 1*s.* 9*d.*; very small flat, $\frac{3}{4}$ pinky, $\frac{1}{4}$ dark fracture, at 1*s.* 1*d.* to 1*s.* 2*d.*; rough medium to bold flat pickings, of rather ordinary loose fracture, at $8\frac{1}{2}$*d.*; and a parcel of low almost black-coated flat root, of ordinary fracture, bought in at 9*d.*, the bids for same not having gone higher than a few pence. Canton, bold flat, $\frac{3}{4}$ pinky grey fracture, bought in at 1*s.* 6*d.*, limit 1*s.* 3*d.* per lb. High dried, mixed sizes, small to bold, fair even pinky fracture, bought in at the high price of 1*s.* 3*d.* per lb. Taking in account the prevailing strike difficulties, the assortment as a whole was not a bad one.

SAFFRON.—Eight tins Valencia, good fair, bought in at 57*s.*

SARSAPARILLA.—Six bales offered, and 1 sold at 9*d.* for ordinary lean Jamaica. Honduras bought in at 1*s.* 3*d.*

SENEGA ROOT.—Four bales, part small and dusty, bought in at 2*s.* per lb., the bid of 1*s.* 10*d.* not having been accepted.

SENNA.—Of 91 bales Tinnevelly, 16 sold at $\frac{1}{2}$*d.* to 1*d.* per lb. for ordinary specky leaf, and at $2\frac{1}{2}$*d.* for small narrow green ditto. The bulk consisted—with the exception of a few lots of which the samples had not come up—of old import of very poor quality. The recent larger arrivals will no doubt be ready now for next sales, a fortnight hence.

SHELLAC.—The total printed for Tuesday's sales was of small importance, amounting to 582 cases only, of which 428 were sold at firmer rates as under:—

Orange printed	392 chests,	sold 263 chests	
AC garnet	125 ,,	,, 125	,,
Button	65 cases	,, 40	,,

Unworked fine pale lemony VSO at 98*s.* to 99*s.*; good fair second orange RG in diamond at 75*s.*, S in diamond at 72*s.*, livery at 63*s.* to 69*s.*; garnet AC at 56*s.* to 57*s.* for good free, and at 56*s.* to 57*s.* for slightly blocky; worked livery orange, dark to reddish at 67*s.* to 71*s.*; unworked button, fine third at 83*s.* to 84*s.*, fair ditto at 76*s.*, and fine first bought in at 105*s*, for which 102*s.* 6*d.* would have been accepted there and then. Value of TN standard, 71*s.* per cwt. In addition to the quantities disposed of as above, there have been sold on the spot and to arrive since the beginning of the week about 500 chests at 69*s.* to 71*s.* for TN, spot, at 72*s.* for September, and at 71*s.* 6*d.* to 73*s.* 6*d.* for December delivery.

	Sept.	Oct.	Nov.	Dec.
TN Orange, sellers	72/6	73/6	73/6	73/6
,, buyers	71/	72/	72/	73/
AC Garnet, sellers	59/	59/	60/	59/6
,, buyers	57/	58/	58/	58/6

SODA SALTS.—Ash at $1\frac{1}{4}$*d.* landed. Bicarbonate at 5*l.* 2*s.* 6*d.* ex warehouse. Caustic slow; cream at 6*l.* 15*s.*, and white 60-per-cent. at 6*l.* 15*s.* to 7*l.* landed. Crystals firm, at 50*s.* 6*d.* to 51*s.* ex ship London; at 44*s.* to 44*s.* 6*d.* on the Tyne. Nitrate quiet, at 8*l.* 10*s.* for ordinary on the spot, and at 9*l.* 2*s.* 6*d.* to 9*l.* 5*s.* for chemical.

SPICES.—The strike at the docks interfered again with this week's sales, which had to be abandoned owing to the insufficiency of samples to hand. We therefore quote once more the nearest values of pepper: Black Singapore, $7\frac{1}{8}$*d.* to $7\frac{1}{4}$*d.* per lb. for spot, and 7*d.* for arrival; black Penang, 5*d.* to 6*d.* per lb.; WC, $6\frac{1}{4}$*d.* White Singapore, $11\frac{3}{8}$*d.* to $11\frac{1}{2}$*d.* per lb.; white Penang, $8\frac{1}{2}$*d.* to $8\frac{5}{8}$*d.* per lb. Pimento dearer, and much sold at $3\frac{1}{4}$*d.* to $3\frac{3}{8}$*d.* for fair to good. Zanzibar cloves, $6\frac{3}{8}$*d.* to $6\frac{7}{8}$*d.* per lb. for dark to fair. Cassia lignea, 21*s.* 6*d.* to 22*s.* per cwt. Mace, ordinary to good, 2*s.* 6*d.* to 3*s.* 1*d.* per lb. Nutmegs, from 132 to 60 to the lb., 2*s.* to 3*s.* 8*d.* Ginger, Bengal, nominal, 13*s.* 6*d.* per cwt.; Cochin cut from 25*s.* to 67*s.* 6*d.* per cwt. Tapioca, flake Singapore, 2*d.* to $2\frac{1}{2}$*d.* for fair to fine; medium pearl, 17*s.* 3*d.* to 17*s.* 6*d.*; seed pearl, 17*s.* to 17*s.* 3*d.* per cwt.

SQUILLS.—Eighty-four bags bought in, fine white at $2\frac{1}{4}$*d.* per oz., good at $1\frac{3}{4}$*d.* per oz., and yellowish at $1\frac{1}{2}$*d.* per oz., for which there was no demand whatever.

SUNDRY CHEMICALS.—Bromide of potassium, 1*s.* $6\frac{1}{2}$*d.* Iodide, 11*s.* 6*d.* to 11*s.* 9*d.* Tartar emetic, 1*s.* 5*d.* per lb.

TAMARINDS.—Of 55 barrels offered 15 sold, dry Antigua at 9*s.*, and good juicy Barbadoes at 15*s.*

TEA.—The deadlock in the tea trade caused by the strike has abated in some degree, and dealers are now obtaining delivery from all the bonded warehouses, though in many cases only in driblets, and at much trouble and expense. Great inconvenience has been caused to retailers all over the country, the present system of buying from hand to mouth and holding small duty-paid stocks reducing many grocers to dire straits. Sales for the week of China tea have been nominal, and little has been done privately, though there has been more disposition for business than last week. N. S. Kaisows have sold as low as $7\frac{1}{4}$*d.* per lb., and some good Chingwos have changed hands at 1*s.* 1*d.* to 1*s.* 3*d.*

per lb. New green teas are offered more freely, and show easier rates. Indian and Ceylon sales are extremely small at the moment, though there is a great quantity of tea in importers' hands waiting for the termination of the strike. All grades have been keenly competed for, and in many cases very full prices paid, but under the present exceptional circumstances, the total amount for the week being so trivial, compared with the sales usual at this time of the year, prices can hardly be quoted as dearer generally. Ceylons for price, however, show a most distinct advance, and nothing worth touching under 8*d.* per lb. is to be had.

TONQUIN BEANS.—Two cases Pará, part foxy; one sold at 1*s.* 11*d.*, the other bought in at 2*s.* 6*d.*

TUMERIC.—Bengal is still selling at 10*s.* 6*d.* to 10*s.* 9*d.*, and Madras finger is worth 10*s.* 6*d.* to 10*s.* 9*d.* per cwt.

WOOD OIL.—One hundred drums bought in at 4½*d.*

THE GERMAN MARKETS.

HAMBURG, September 3.

BUSINESS in general has again been extremely quiet the last week. In drugs the only changes of importance are a rise in ergot and jalap and a firmer market in Carnauba wax and saffron. On the other hand, balsam of Peru cascara sagrada, and calumba are very weak. In chemicals, quinine looks better.

ALOES.—*Curaçao* remains obtainable at very low rates, 40m. to 55m., according to quality. Further arrivals took place this week.

BALSAMS.—*Copaiba* steady, but little doing. Owners are firm; 4.60m. to 4.75m. for Maracaibo and Angostura and 4.40m. to 4.50m. for Bahia is asked. *Peruvian* is weaker. In face of the large supply offered, 7⅛m. for a genuine quality would be accepted.

BARKS.—Of cascara sagrada 22 packages genuine bark realised at about 82½m.—a very low price. *Cinchona*: Porto Cabello quiet, and prices tending lower. The large supply at first hands—about 600 bales—depressed the market, and business has been confined to small parcels. *Condurango* without business, but no alteration in value.

ERGOT OF RYE.—Holders are very firm, and will only sell moderate quantities. *Matico*: The greater part of the stock has found buyers at a very low price; the price now ranges from 85m. to 105m., according to quality.

ROOTS.—*Calumba*: The demand is extremely slack. A new lot of 165 bags just arrived is offered at 25m. Of *Jalap* a speculator cleared the market, and prices advanced to 115m. to 120m. *Sarsaparilla*: Very low prices are ruling here for *Mexican* root.

WAX.—*Carnauba* selling at higher rates; 115m. to 120m. for yellow; ordinary grey held at 80m. to 85m. Of *Mozambique* bees'-wax 86 packages came in, for which 95m. is quoted.

THE AMSTERDAM CINCHONA AUCTIONS.

(*Telegram from our Correspondent.*)

AMSTERDAM, September 5.

AT the cinchona auctions held here to-day a heavy stock was offered, and the whole of it was readily disposed of at a distinct advance in prices. The 3,051 packages were equal to about 270 tons of bark. The unit value based on the prices obtained is fully 8½c. per ½ kilo. (1¾*d.* per lb.). The following prices were realised:—Manufacturers' barks: Quill, broken quill, and chips, 11c. to 71c. (=2⅛*d.* to 1*s.* 2⅛*d.* per lb.); ditto root, 12c. to 15c. (=2⅛*d.* to 3*d.* per lb.). Druggists' barks in quills, broken quills, and chips, 6c. to 81c. (=1⅛*d.* to 1*s.* 4*d.* per lb.); ditto root, 28c. to 68c. (=5½*d.* to 11*d.* per lb.). The chief buyers were Messrs. C. L. Schepp & Zoon, Rotterdam; the Brunswick Quinine Works, the Amsterdam Quinine Works, Auerbach Quinine Works, and Zimmer & Co.

LONDON DRUG STATISTICS.

THE following figures refer to the stocks of the principal drugs in the port of London on August 31, 1889, and to the imports and deliveries from January 1 to August 31, as compared with the preceding year:—

Article	Stocks		Imported		Delivered	
	1889	1888	1889	1888	1889	1888
Aloes ..cs & pkgs	7,016	6,253	2,462	4,178	2,435	3,647
„ .....gourds	1,598	2,235	195	597	646	4,040
Anise, Star .. chts	77	167	40	100	102	113
Arrowroot ....cks	14,658	15,002	12,330	12,042	8,538	10,004
„ bxs & tins	6,497	8,334	1,724	4,287	3,087	5,999
Balsams ..cks, &c.	2,498	232	126	153	272	516
Bark (Cinchona),						
S. American cases	482		10		34	
bls. &c.	34,244		8,817		3,816	
E.I., Ceylon, and		61,367		46,589		44,726
Java .....cs	629		932		899	
bls, &c.	26,728		36,663		31,843	
Borax.....pkgs	566	1,891	6	667	58	11
Calumba .... „	1,669	2,138	469	988	644	1,502
Camphor .... „	685	2,230	1,841	5,288	2,233	5,036
Cardamoms ..chts	1,526	832	2,614	2,057	1,668	1,935
Cocc. Ind. bgs, &c.	202	441	94	454	241	299
Cream of Tartar cks	11	11	14	19	16	21
Cubebs.....bgs	249	241	456	428	331	300
Dragon's Blood chts	176	54	176	127	80	152
Galls, China, &c. cs	1,097	3,628	1,845	8,144	2,873	6,326
Turkey, &c...sks	5,815	4,493	8,012	6,069	4,914	4,660
Gums—						
Ammoniac pkgs	115	124	6	8	16	84
Animi & Copal pkgs	5,124	5,348	5,226	6,762	5,065	5,793
Arabic..... „	24,902	16,960	23,054	21,483	17,693	15,695
Asafœtida.. „	530	422	895	303	714	331
Benjamin .. „	2,205	2,035	2,301	2,377	1,981	1,840
Damar .... „	3,315	2,666	4,977	3,137	4,193	3,920
Galbanum.. „	7	—	7	—	—	—
Gamboge .. „	118	112	244	146	219	140
Guaiacum .. „	—	32	101	3	117	48
Kino ..... „	102	110	37	66	22	47
Kowrie ....tns	1,332	1,674	1,792	2,362	1,831	1,679
Mastic ....pkgs	43	115	26	49	14	33
Myrrh..... „	470	462	216	357	291	449
Olibanum .. „	5,489	5,198	7,763	6,868	4,982	5,587
Sandarac .. „	720	1,182	700	1,203	737	1,070
Tragacanth „	9,327	5,337	8,030	7,425	4,491	3,992
Indiarubber, E.I. tons	350	420	377	551	417	366
Madagascar.. „	32	43	99	91	94	73
S. American ..„	65	152	158	280	142	241
African, &c... „	419	610	358	683	458	671
Ipecac. ..cks & bgs	431	22	929	312	566	412
Jalap .....bls	70	194	—	152	17	109
Myrabolans ..tns	6,717	8,706	6,648	5,885	7,586	7,703
Nux Vomica pkgs	408	453	502	933	1,211	1,076
Oils—						
Anise .....cs	28	42	209	103	131	130
Cassia ..... „	114	56	228	149	161	175
Castor .....cks	343	668	464	293	696	519
„ .....cs	2,849	11,434	2,924	11,461	7,083	7,537
Cocoa-nut....tns	2,114	1,978	3,208	3,146	2,456	2,984
Olive ..cks, &c.	712	769	2,926	1,608	2,574	1,516
Palm .....tns	33	237	68	153	95	124
Opium ..chts, &c.	1,192	1,517	467	489	832	1,077
Plumbago .... tons	621	305	2,597	1,214	2,408	2,062
Rattans .....bdls	103,402	104,783	149,112	285,377	125,616	319,032
Rhubarb.....chts	938	1,164	875	1,019	960	1,082
Safflower .....bls	527	371	32	301	94	302
Sarsaparilla ....bls	236	689	835	1,059	955	867
Senna .... bls, &c.	1,101	1,084	901	1,232	1,698	2,664
Shellac, Orange chts, &c.	46,105	51,809	15,066	32,132	15,685	22,003
Garnet.. „	14,842	18,579	6,361	9,717	6,728	6,058
Button.. „	6,255	10,951	4,072	6,074	5,649	6,309
Total ..chests	67,202	81,339	25,499	47,923	28,062	31,370
Sticklac ..chts, &c.	3,640	4,193	950	907	1,138	1,094
Gambier .....tns	542	580	5,710	6,439	6,327	7,683
Cutch ..... „	3,480	2,319	2,970	3,918	2,806	2,554
Turmeric .... „	2,681	3,291	283	1,462	826	769
Vermilion, chts, &c.	17	15	104	49	103	97
Wax, bees' ..bls & srns	808	504	864	760	582	355
„ oks & cs	1,233	1,533	2,322	1,696	2,158	1,840
„ cakes	7	3	201	24	104	—
„ Japan, vg. pkgs	851	1,207	284	1,412	884	1,017

EIKONOGEN, a new photographic developer, discovered by Dr. Andresen, of Berlin, is said to be an accelerator of the plate, and gives a more brilliant negative than that obtained by pyrogallic acid or hydrokinone.

Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c. will be attended to in the order received.

The Chemists' Almshouses.

SIR,—With reference to the paragraph in your last issue respecting the proposed almshouses and convalescent home for chemists and assistants, permit me to state that the property referred to, so far from being a castle in Spain or in the air, is very much in evidence, being a most substantially-built block of buildings, desirably situate in a quiet sea-side town in Kent, and admirably adapted for such a purpose.

Drapers, grocers, fishmongers, and other businesses have their almshouses, why should not chemists have theirs? Are all chemists successful in business? And are the assistants so highly paid that such an institution would be a superfluity? If you can reply to these questions conscientiously in the affirmative, then I have been misinformed.

As proprietors of patent medicines are so greatly indebted to chemists and their assistants for their notorious great wealth, it would only be a graceful act on their part to subscribe liberally towards such a proposal.

I am not a chemist nor druggist, and I am certainly not the agent for the owner of the property, nor connected with his auctioneer in any way. It may be presumption on my part to take the initiative in such a matter, but I shall be willing to retire if someone connected with the profession will take my place. I will freely undertake the clerical part of the work, which would be of an arduous nature.

As you found space for an attack upon me—unjustifiably, I think—I hope that you will accord space for my defence in your next issue. I am, sir,

32 Brailsford Road, Brixton, S.W., Sep. 2. Your obedient servant, H. A. PICKERDEN.

The Patent-medicine Trade.

SIR,—There seems to me to be the elements of success in the plan laid down by "Orcadia" in your last week's issue; but it is capable of improvement. Most of us have preparations which have taken well with the public, and which we know are reliable and *bonâ fide*. I will imagine one such, for which I have a large retail demand. Now, supposing I alter its present name and call it something on which we (a ring of chemists) have agreed. I will suppose it is a 1*s*. article, the net cost of which is 4*s*. per dozen; add to this 1*s*. per dozen for labour in putting up and carriage, which should be the proprietor's profit. We then push this article to the utmost. The result would be that it would be inquired for by other patent-medicine vendors, whom we could supply at 9*s*. per dozen, this extra profit forming a reserve for advertising or dividing as a bonus.

Could not the Editor of THE CHEMIST AND DRUGGIST arrange a conference? Yours faithfully,

P. M. T. (120/57.)

SIR,—There is a large demand for well-known patents. If chemists do not supply this demand the trade will pass into other hands. Much has already gone. If "Heder's" counsel be followed, and we keep patents in the background, the public will cease to recognise us as the retailers of these remedies and go elsewhere. We shall have fewer customers in our shops; our chances of substitution will be gone. I note that the advocates of substitution pride themselves on their persuasive powers, glory in the magnificent success of earning an extra twopence by displacing a patent, and seem to imagine that once their own brand is introduced the public will cease to buy any other. What nonsense! Cannot the interloping grocer buy from the same sources as they, and even have put up for him imitations of the substitutionist's own goods, and thus overturn the pedestal your correspondents dream of rearing for themselves? No, sir, it is not by petty imitation, not by saying, "this is my own preparation, which I can guarantee as being better than the original," nor by slavishly copying other labels, with an eye to deceiving the public, that we may ever hope to achieve any great success and gain the confidence of our customers.

If the chemist can, with his own capital, brains, and intellect, produce new and original articles of greater worth than the existing patents, articles which will stand—like Bunyan's tub—on their own meritorious bottoms, if he will advertise freely, and treat the trade better than existing patent-medicine proprietors do, then he may stand a chance of displacing preparations which are now termed "quackery," but which, with 50 per cent. profit, would be called legitimate pharmacy.

Perhaps, when the grocer has taken nine-tenths of the trade, and left the chemist high and dry to take charge of the scheduled poisons, the facts of competition will be looked straight in the face. In my opinion this is the only way out of the difficulty. The chemist must prove himself a better business man than his rivals, not only by having a superior knowledge of drugs, but also by being able to supply them at as reasonable a price. He who keeps the best stock, who supplies what he is asked for, and who only recommends when his opinion is invited will not only command the best trade, but will be most likely to secure the confidence of a public as well acquainted with medicines as the chemist was a generation ago. Times have changed, and are changing. Chemists have not advanced with the times; it is to their interest to do so. Yours faithfully,

ONE WHO HOLDS HIS OWN.

Cobalt Colour for Show-bottles.

SIR,—I think "Cedas" will not complain (if he tries it) of the subjoined formula for pink colour for show-bottles. He will find it neither tedious, bungling, nor unsatisfactory. Properly made, it is a splendid colour. In a window adapted for the purpose, with a good light, three 4 or 6 gallon carboys, filled with colours as follows—viz., pink, blue, and green—the effect is very striking:—

	Oz.
Oxide of cobalt	2
Nitric acid (pure)	1 (by weight)
Muriatic acid (pure)	1 „
Dissolve and add—	
Liq. ammon. fortiss.	fl. ℥vj.
Aquæ destill.	cong. iij.
Acid. sulph. (pur.)	1 oz. (by weight)

Set aside one month.

Yours truly,

Saffron Walden, Sept. 3. HENRY MACHON.

Pink Colour for Show-bottles.

SIR,—In answer to my inquiry you suggested that my cobalt nitrate might be at fault. I have again tried to obtain the desired colour (pink) by following your directions closely, with the result that I have produced a very pretty mauve. Not satisfied, I obtained a fresh supply of cobalt from another house, which I have tried with a like result. I may add that I obtained the cobalt from houses of good repute. I wish to thank Mr. Douthwaite for his suggestion.

Yours truly,

September 2. CEDAS. (120/35.)

The Trade in Queensland.

SIR,—I notice in the issue of THE CHEMIST AND DRUGGIST of June 1, which has just reached me, one "Chemicus" (58/49) assures you there is a good opening for a wholesale house in Townsville.

I regret "Chemicus" does not disclose his identity, as he

is evidently ignorant of the subject he writes upon. However, upon the question under discussion I am bold enough to make the assertion that I, William Clayton, retail chemist and wholesale druggist, am in a position to know a great deal more about the subject than he ("Chemicus") does. I have been in this place since 1871, and have seen the town rise from a mere hamlet to its present size of 10,000 inhabitants. If "Chemicus" had only half the experience in starting others which I have had, he would be silent in the matter. At the present time I know of only a few chemists (outside of Townsville) in this district who are independent of the Brisbane houses. One after another has gone down under pressure from those firms—often to my own loss—by that ticklish document, a bill of sale, coming on the scenes amidst "shoals and shallows."

For the sake of discussion I will assume there is a good opening here for a wholesale druggist; but I maintain it is entirely a question of capital. If a wholesale house should be in the near future started here, the same amount of credit will have to be given as at present by the two Brisbane houses. Another important factor in the prospect is both local established opposition and the certainty of one of the Southern houses opening here when realising the fact that the spoliation of the Northern business was threatened.

The assumption that all supplies are obtained from Brisbane and Sydney does not apply with any truth to three of the chemists here, including myself.

The autonomy of North Queensland is the ardent desire of all the old residenters, but its early accomplishment is not likely to be realised with the present antagonism by the Government to one of its industries—sugar planting.

I remain, yours very faithfully,

Townsville, July 13. WM. CLAYTON.

A Book of Formulæ.

SIR,—Your leader on eau de Cologne and its manufacture, with the resulting correspondence, has made THE CHEMIST AND DRUGGIST more popular than ever, and it is to be hoped you will favour your readers with the promised leader on a basis for lavender water. I thoroughly endorse our respected friend "Heder's" suggestion that you publish a book of reliable formulæ for proprietaries. Perhaps "Orcadia's" suggestion to have stock labels of real artistic merit, the name and address only being altered for each chemist, thus reducing the cost, which at present is high for good fancy labels, could also be adopted.

Hoping others will offer their suggestions, I am,

ATTRACTION. (120/8.)

Perfumery Formulæ.

Our valued contributor *Tulip* sends us the following dozen formulæ for lavender water and four for eau de Cologne:—

Lavender Water.

Oil of lavender	4½ oz.
Tonquin beans	7 „
Oil of bergamot	2 „
Otto of rose	160 minims
Musk	32 grains
Rectified spirit	3 gallons (old measure of 128 oz. to the gallon)

Ambergris	12 grains
Oil of bergamot	6 oz.
English oil of lavender	1½ „
Oil of cloves	6 drachms
English oil of santal	4 „
Otto of rose	4 „
Musk	4 „
Rectified spirit	3 gallons (old measure, 128 oz. to the gallon)

English oil of lavender	16 oz.
Oil of bergamot	4 „
Rectified spirit of wine	4½ gallons (old measure)
Distilled water	5 pints (old measure)
Musk	30 grains
Sugar (powdered lump)	1 oz.
Orange-flower water	5 pints (old measure)

English oil of lavender	3 drachms
Essence of ambergris (ʒj. in 16 oz.)	1 drachm
Oil of bergamot	½ drachm
Orange-flower water	1 oz.
Rose water	1 „
Rectified spirit	1 „

English oil of lavender	2½ drachms
Oil of bergamot	½ „
Musk	10 grains
Rectified spirit	16 oz.

English oil of lavender	2 oz.
Foreign „ „ (good)	1 „
Oil of bergamot	1 „
Essence of musk (ʒj. in 16 oz.)	6 drachms
Essence of tonquin beans (1 in 10)	1 oz.
Rectified spirit	96 „

English oil of lavender	3 oz.
Oil of bergamot	1½ „
Essence of tonquin beans (1 in 10)	1 „
Triple rose-water	12 „
Rectified spirit	80 „

Musk	40 grs.
Oil of bergamot	1 oz.
English oil of lavender	5 „
French essence of millefleur	8 „
Pulv. rad. iridis	2 „
Otto of roses	20 minims
Essence of ambergris (ʒj. in 16 oz.)	2 oz.
Distilled water	40 „
Rectified spirit	6 pints

English oil of lavender	½ oz.
Oil of bergamot	80 minims
Ess. of tonquin bean (1 in 10)	80 „
„ musk (ʒj. in 16 oz.)	60 „
Rectified spirit	16 oz.

English oil of lavender	10 drachms
Oil of bergamot	1½ „
Ess. of musk (ʒj. in 16 oz.)	½ oz.
Oil neroli	4 drops
„ of geranium	6 „
English oil of sandal wood	7 „
Rectified spirit	30 oz.
Water	30 „

Oil of lavender	4 drachms
„ bergamot	½ drachm
„ lemon	½ „
Musk	2 grains
Rose water	2 oz.
Rectified spirit	18 „

English oil of lavender	½ oz.
Oil of neroli	10 drops
Ess. of ambergris (ʒj. in 16 oz.)	1 oz.
„ musk (ʒj. in 16 oz.)	1 „
Rectified spirit, to make	30 „

Eau de Cologne.

Oil of bergamot	½ oz.
„ lemon	½ „
„ rosemary	1 drachm
„ citronella	20 drops
„ neroli	1 drachm
Rectified spirit	32 oz.

Oil of bergamot	12 minims
„ lemon	12 „
„ neroli	12 „
„ orange peel	12 „
„ rosemary	12 „
Cardamom seeds, in powder	60 grains
Rectified spirit	1 pint

Oil of lemon	2 drachms
„ neroli	2 „
„ orange peel	2 „
English oil of lavender	20 minims
„ „ rosemary	10 „
Oil of bergamot	7 drachms 30 minims
Rectified spirit	66½ oz.
Orange-flower water	17½ „

Oil of bergamot	6 drachms
„ lemon	1 oz.
„ lavender	1 drachm
„ neroli	1 „
„ rosemary	½ „
Ess. of musk (ʒj. in 16 oz.)	4 „
Rectified spirit	4 pints

Notts (120/50) asks us if the quantities of essences in the following are "about right." He is not altogether satisfied. The first water is sold at 6*d.* and the second at 4*d.* per oz. The first we should improve by using 3 grains of musk instead of the essence, and only 30 minims of bergamot (which is better out altogether). In the second bergamot is present in much too large proportion, and it quite "kills" the jasmine; modify it as above, and use otto of rose instead of rose water. The best spirituous solvent for perfume-oils is a mixture of rectified spirits 9 parts and water 1 part, mix, and allow to cool before the perfumes are dissolved in it:—

Aq. Lavand. Opt.

Ol. lavand. Ang.	℥j.
Ess. moschi	ʒss.
„ ambergris	ʒij.
„ bergamot	ʒij.
Aquæ rosæ	℥iv.
Sp. v. rect.	℥xxiv.

M.

Aq. Lavand. Sec.

Ol. lavand. (Exot.)	ʒij.
Ess. moschi	℥j.
„ bergamot	℥j.
„ ambergris	℥ss.
Ol. jasmin.	ʒij.
Aqnæ rosæ	℥x.
Sp. v. rect.	Oiij.

M.

Hair Restorer.

SIR,—I had recently brought to me a bottle of a new hair-restorer, with a request that I would try to analyse it, and find out the cause of its staining the fingers whilst applying it, and to see if this could be in any way obviated. It was put up by a London hair "specialist" in 16-oz. light blue glass bottles, for which the price of 6*s.* 6*d.* was demanded, and in my customer's case, at any rate, very thankfully paid for a period of eighteen months. The composition of this "harmless, colourless, nature's hair colour restorative," for which a long list of special virtues were claimed, would, as nearly as I could determine, be represented by the following formula:—

Lead acetate	gr. 90
Sodic hyposulphite	gr. 200
Distilled water	16 oz.

M.

It contained neither perfume, spirit, nor glycerine. My chief object in writing to you is to ask if you will kindly suggest a formula in next week's CHEMIST AND DRUGGIST for a really good "hair colour restorer and tonic," either dark brown or black would be most suitable, and one that would comply with the wonderful properties claimed for the above preparation, viz., to be "colourless, harmless, odourless, stainless, &c."

By-the-by, would it not be a good plan for you to open a column for the discussion of formulæ by your correspondents? Yours truly,

GEORGIUS. (117/5.)

[It is not possible to compound a preparation which will do all that speciality advertisements say. If it were, the speciality manufacturers would find it out. Our columns are always open for the discussion of matters of interest to pharmacists, and we may recall the fact that we have a column of "Druggists' Specialities," which is open for such communications as "Georgius" refers to.—ED.]

Over-dosing with Arsenic.

SIR,—The admission of Dr. Stevenson, quoted by you last week, may be correct, but I can vouch for what used to be a common cause of complaint in one large hospital in London, where patients frequently applied for a repetition of their medicines, after having taken fourteen days' supply in ten days, and even less. I have known this to occur when patients were ordered ♏x. and ♏xv. doses liq. arsenicalis. Other powerful drugs, as strychnine, belladonna, &c., have also been taken in much larger doses than were intended through the same cause. But it was a rare occurrence to detect any error of doses in the various prescriptions of the medical officers. The same could not be said of the students, who were frequently allowed to prescribe, apparently without continual supervision of the staff, fatal consequences being averted only by the detection of the error by the dispenser. Heroic doses and treatment were fashionable then.

ATTRACTION. (120/8.)

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

A Nobleman's Prescription.

SIR,—Would you kindly ask any of your readers how the enclosed should be dispensed? It was written by a prominent physician at the West-end, and had been made up at a West-end pharmacy:—

Tinct. quiniæ ammoniat.	ʒij.
Potass. citratis	ʒij.
Æther. chlor.	ʒss.
Aq. ad	℥viij.

Coch. ij. quartis horis.

The prescription was brought by a nobleman in high position at Court. Yours,

CHEMICUS. (117/8.)

[Prescriptions of this character are fully discussed in the chapter on Quinine Mixtures in "The Art of Dispensing." It is not possible to make the mixture clear, and the addition of 3 drachms of mucilage to the aqueous solution of potassium citrate before the tincture is added is necessary to keep the quinine from adhering to the bottle.]

Not a Nobleman's.

SIR,—The under-noted recipe came into my hands the other day. Would like to have the opinion of some one of your able correspondents as to best method of compounding:—

Menthol	ʒj.
Aq. dest.	℥x.

Ft. gargarisma.

Ferri et quin. cit.	ʒiss.
Potass. bicarb.	ʒij.
Syr. aurantii	℥j.
Aquæ ad	℥vj.

Problem.—To make clear mixtures.

CIVIS. (117/32.)

[The writer of this knows as little about what he has written as "the prominent West-end physician," and it would do him good to tell him so. The gargle is nonsensical, and it is impossible to combine quinine with alkalies to form a clear solution.]

73/30. *Cocaine Hydrochlor.*—**Sulphonal Pills.**—Glycerine of tragacanth is the best excipient for sulphonal, but it is ridiculous to make the remedy into pills. Not more than 4 grains can go into one, and five or six pills would have to be taken for a dose.

117/44. *Hydrarg.*—It is evident that a word has been omitted from the prescription. Ask the physician what it is.

LEGAL QUERIES.

120/74. *A Qualified but Unprotected Chemist.*—Your letter is too long, too discursive, and too impractical; and, crowning objection, is written on both sides of the paper. You ask, is it "fair to a young man to be induced to leave his home" to study this, that, and the other, and then "make a fool of him through the present existing laws of non-protection after qualification?" Of course it is not right to induce the young man to throw himself away under false pretences; but who is this guilty party who is trapping the guileless? Surely it is nobody in the business already. The interest of existing chemists and druggists is to keep others out. Our correspondent says:—"Lately there has been a great agitation about the Maybrick case. I noticed from the papers that it was no difficulty to obtain thousands of signatures in her favour. Is not our case one which is as worthy of public attention as hers?" The majority of us, we hope, have got stamina enough to prefer to take care of ourselves, even if the public were at all disposed—which it is not—to extend its charity to us. We are always willing to give space for real grievances, or speciously presented imaginary ones, but we do not wish to be the organ for every kind of discontent and dyspepsia.

121/71. *R. S. P.*—The youth should be bound to the executors if they are the proprietors of the business. The chemist who signs the certificate for the Minor examination need not have been his employer.

121/52. *A. H.*—You may make aconite liniment with methylated spirit, and of course, having made it, you may use it as an ingredient in your toothache essence. We think if you explain this to the supervisor you ought to have no further trouble. Show him the Board's order, as published in THE CHEMIST AND DRUGGIST, March 30, 1889, page 417.

120/32. *Sweet Lavender.*—The trade-mark, you will see, comprises a portrait as well as the words quoted. But you had better ask the firm if they are willing to disclaim the right to the exclusive possession of these words, and get that disclaimer entered on the register. Let us know the result of the correspondence, and then we will consider whether we can help you further if it should be necessary.

120/15. *F. H. C.*—*Bonâ-fide* wholesale trade is not affected by the Pharmacy Act, but the title "wholesale druggist" can be protected under the Act by the Pharmaceutical Society.

120/5. *Vernet.*—There is no fixed custom about holidays. These must depend upon arrangement, and, no doubt, vary according to the extent of the business done. The most frequent system is to give a fortnight in each year to each employé.

MISCELLANEOUS INQUIRIES.

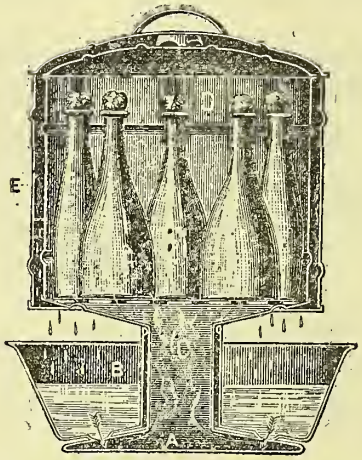
A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

115/5. *J. H. D.*—**Soluble Essences of Ginger and Lemon.**—Formulæ are given in the following issues:—December 29, 1888, page 900; February 23, page 280; April 6, page 494; and as recently as August 17, page 256.

120/89. *Ajax.*—**Powder for Tender Feet.**—See Aug. 17, page 255.

114/69. *W. P. F. Miller.*—**Soxhlet's Method of Sterilising Milk** consists in keeping the milk in a water-bath for a certain time. We give you a section of an apparatus which is an improvement upon Soxhlet's. A is the boiler, from which a constant current of steam is carried to the



receiver D, in which the bottles of milk are placed. Here the temperature is never under 212° F., and sterilisation of the milk is accomplished by maintaining it at that temperature for about forty-five minutes. Boiling for the same length of time in a vessel exposed to the air is not efficient, as the temperature in different parts of the vessel is found to vary considerably. This is the main objection to Soxhlet's apparatus.

119/45. *J. M.*—**Photographic Developers.**—A great many would like to know a new process which would obviate the necessity of using "hypo." Our correspondent has presumably obtained an idea that such a process has been discovered from the fact that plates are now offered for sale which are coated on the back with a developer in a dry state, and after exposure they have merely to be placed in water and the dish rocked, when the salts are dissolved and the latent image developed. Although numerous flattering testimonials are published of the same, it seems reducing the art of development to a mechanical operation, and allowing no chance of the admixture of "brains" nor the possibility of making a *picture* by the operation of development, which is often done. These **Water-developing Plates** were introduced by Dr. Backelandt, and the English agents are Bonne & Co., 41 Eastcheap, E.C. "Hypo" is the best fixing agent known; sulphite of soda, proposed by Abney, is not nearly so powerful. Cyanide of potassium, though more powerful than "hypo," is apt to attack and dissolve the delicate deposit of the image-forming silver. Saturated solutions of the alkaline bromides and chlorides have been used, but with only partial success. Sulphocyanide of ammonium has been suggested, but the cost is too great. "Hypo" is a good servant, but bad master: it is extremely difficult to eliminate from prints and negatives, and, if left in, causes, in both instances, fading of the image, and in the former yellowing of the whites of the picture. If "J. M." or anyone else would only suggest a substitute for "hypo," equally cheap and efficacious, a fortune and lasting fame would be the reward.

118/27. *Paste.*—Last week we gave two formulæ for red polishing paste. **Black Polishing Paste.**—There are several recognised forms for this—some with soap, others with oil as the excipient. The following formula is one of the best:—

	Oz.
Rotten stone	8
Oxalic acid	1
Glycerine	½

Mix thoroughly, and make into a mass with dilute sulphuric acid (1 in 10).

117/43. *A.*—The usual **Charge for the Use of the Dark Room** is nothing when plates are only changed, but if developed a charge of sixpence is customary. The question of appliances requires rather too long an answer to be given here. Our next article will treat of this subject in full. Briefly, developing dish, fixing dish, chemicals, lamp, and measures would be required. [Please do not use a number instead of a *nom-de-plume* for your queries; we have our own numbers, which we prefer.]

118/73. *Wild Cherry.*—**The Syphon Trade.**—Before publishing your complaint we should like to know the exact account of the losses, and also what steps you and the makers have taken to investigate the matter.

117/34. *Lewis.*—Solution of cocaine painted on the gums merely is of no use in tooth-extraction. See reply to "A. G. S. O."

118/8. *A. G. S. O.*—**Cocaine in Tooth-extraction.**—Occasionally cocaine, when injected into the gums for dental purposes, produces very alarming effects. The reason for this has not been absolutely made out, but it is highly probable that alarming symptoms are the result of the use of impure alkaloid, or solution which is not fresh. If you have not seen the anæsthetic administered hypodermically, and are afraid of the results, you are just one of those persons to whom the advice given in January is specially applicable. The way in which the alkaloid is used, and the precautions which should be observed, are as follow:—In the first place see that the cocaine hydrochlorate is absolutely pure—a characteristic which is easily proved by its solution giving an immediate precipitate of crystals when one grain in an ounce of distilled water is treated with a single drop of solution of ammonia. The injection is made by dissolving half a grain of the hydrochlorate in 8 minims of water. Four minims of this solution should be injected towards the root of the tooth with a hypodermic syringe, the middle of which is pushed well "home" to the root. Keep the needle in, and the finger on the top of the gum for two minutes after the injection. Repeat the operation on the other side of the tooth with the rest of the solution; then wait for five minutes, to allow the cocaine to act, before operating If a patient is overcome by the cocaine, you should administer a little brandy, and allow 3 minims of nitrite of amyl to be inhaled.

18/30. *Optimus Odorum* wishes "a formula for really good scent—one he can make a speciality of." A large order this, which can be better executed by the manufacturers of perfumes in bulk who advertise in this journal.

118/23. *Malacca.*—**Dyeing Malacca Canes.**—See the chapter on wood stains in the DIARY.

118/36. *Rusticus.*—**Phenol Sodique Sol.** is a solution of 1 part of carbolate of soda in 100 parts of water. **Carbolate of Soda** is made by saturating 70 parts of carbolic acid with 100 parts of caustic soda (dissolved in a litre of water), and crystallising the salt which is formed. You will observe where you have grievously erred.

117/27. *Apprentice*—**Failure in the Preliminary Examination.**—This correspondent asks if passing in any one subject of this examination avails anything in a future examination—*e.g.*, a candidate fails, passing only, say, in Latin. He presents himself again, and passes in all the subjects save Latin. Will his former pass in Latin be of any value in the eyes of the examiner? [None whatever. Each examination stands distinctly by itself, and a candidate's past achievements are nothing to his credit, just as his past failures are not raked up against him.]

117/24. *Phœnix.*—**Gelatinised Tincture of Kino.**—Throw it out. There is no remedy for it once it has gone wrong.

117/27. *No. 4.*—(1) **Home-work in Analysis.**—Attfield's "Chemistry" seems to be the very book you require for both subjects. For quantitative analysis you will find Sexton's "Outlines" (C. Griffin & Co., 3*s.*), and for qualitative Slatter's "Analysis" (Murby, 2*s.* 6*d.*) are very good. (2) **Emulsifier for Cod-liver Oil.**—The two best, not being gums or anything of that nature, are yolk of egg and tincture of quillaia.

116/43. *F. C. K.* has some of the DIARY (page 255) **Essence of Vanilla** which has become quite thick, and wishes to know how he can restore it to fluidity. The change is most likely due to fermentation. Heat the essence carefully in a strong bottle until it is lukewarm (use hot water for the purpose); then add a tablespoonful of clean silver sand and a teaspoonful of subnitrate of bismuth. Shake well for five minutes: set aside until cold; add 1 oz. of rectified spirit to each pint; again shake, and repeat the agitation every hour. Let stand over night and filter. By this process the essence will be considerably improved, if, as we suspect, the gelatinisation is due to fermentation. We confess to a partiality for vanilla essence which does not contain sugar. For instance, we have never heard a complaint against the following, and it gives an essence of delightful aroma:—

Vanilla, 6 to 7 inches long, cut small ..	1 oz.
Carbonate of potash	15 grains
Boiling water..	3 oz.

Mix, and allow to infuse in a covered vessel until cold; then transfer to a wide-mouth bottle, and add—

Rectified spirit	13 oz.

Macerate for a fortnight, pour off the clear tincture, filter the rest, mix, and add 20 minims of essence of musk.

116/42. *Oleine.*—You will find directions for making **Sticky Fly-papers** in the DIARY, page 259. Note that the formula requires a *sufficiency* of linseed oil, and that honey is more attractive than treacle. See also reply to "Dum Spiro Spero" in last week's issue.

73/27. *Jacob.*—**Asbestos** and **Mica**, like all other silicates, are destroyed by hydrofluoric acid, which forms therewith fluorides of silicon and the basic oxides.

117/56. *W. Banbury.*—The formulæ which you quote are correct. The syrup of opium is equivalent to about $\frac{3}{4}$ gr. of opium per oz.

119/37. *Arctos.*—(1) By "**Tr. Quin. Co.**" we should say that tincturæ quininæ B. P. is meant. (2) **How to Keep Leeches.**—See the excellent suggestions in our issue of September 1, 1888, page 267.

119/40. *J. L.*—Citronella is the best perfume for paraffin.

119/36. *W. J. T.*—**Methylated Chloroform** of British manufacture is pure chloroform, and is used by some for anæsthetic purposes. Only experts can tell the difference between chloroform (purified) made from rectified and from methylated spirit.

119/65. *Seashell.*—See our issue of May 18, page 712, for formula for "Graph" composition. We may tell you that there is a patent which covers such preparations.

Pink Colour for Show Bottles.—Mr. G. L. Douthwaite writes:—"You convey an impression to your numerous readers that colour obtained from cudbear with liq ammon. fort. will 'fade,' and only cobalt will stand. May I inform you that the colour is far prettier than the cobalt pink, and stands well—at least mine has stood six months, and is brighter than ever."

114/24. *Nucis Vom.*—Try the second formula given last week, adding a few drops of turpentine.

115/59. *Quinine.*—**Baldness.**—If the young man's relatives in the preceding generation were bald, it is not at all likely that any applications will prevent him becoming so, now that he has started to grow through his hair. We have faith in Linimentum crinale, as recommended by Squire.

115/62. *Enquirer.*—**Tropical Red Beetles in Greenhouses.**—Have you tried the wash of which we gave the formula on page 855, June 22? It is generally effectual.

115/52. *Young Beginner.*—You omit to state what the pills are to be used for.

115/61. *Hibernicus.* — (1) **Syrupus Hypophosphitum Comp.**—See our issue of September 8, 1888, page 303, for an excellent formula. (2) Consult our buyers' guide in regard to makers of electrical apparatus.

115/65. *Cocaine.*—(1) Consult the U.S.A. consul in your city. (2) An "honorary" degree of Ph.D. is not obtainable—at least not readily. Some one was advertising a year or two ago that he had such things for sale cheap. Of course they are not worth the paper they are written upon. Read the particle by Dr. W. H. Ince in our Summer issue.

115/56. *Indagator.*—It is evident that the aqueous tincture of opium does not contain sufficient preservative. Try double the quantity of boracic acid, viz., 90 grains to the pint.

116/65. *Butcher.*—**Seasoning for Sausages.**—Pimento, 3 oz.; white pepper, 2 oz.; black pepper, 1 oz.; cayenne pepper, 1 drachm. Mix. You will find in the DIARY, page 257, all about potted meat flavours.

112/16. *Paints.*—The terebine of painters is, we understand, simply turpentine treated with 2 per cent. of sulphuric acid.

112/71. *F. F. W.*—**Natural Fruit Essences**, such as strawberry and raspberry, are made by adding to sound ripe fruit 15 per cent. of its weight of rectified spirit, and setting aside for a few weeks. Then the juice is pressed out, in this condition sold, or it may be distilled, coloured, and after twelve months it is ready for use, the odour developing very fully during that period. Much of the "essence" which is sold is really the juice.

115/13. *Bract.*—Good **Dentists' Wax** is a difficult thing to make, as it must melt quickly in hot water and set rapidly in the mouth. We have met with a wax consisting of 7 parts of hard paraffin and 1 part of Japan wax. A better article is made by melting together English beeswax, 6 parts; stearin, 1 part. In all cases colour with alkanet, and perfume with cinnamon and ginger-grass oil.

104/28. *Fritz.*—We shall be giving full information as to how to become a dentist in our issue of September 21, and shall keep such cases as yours specially in view.

113/8. *J. W. B.*—**Soluble Copaiba.**—We presume that it is Frank's specific you mean. This is made by boiling together for five minutes 2 parts of copaiba, 3 parts of liquor potassæ, and 7 of water. Set aside for a week, draw off the bottom portion, and add 1 part of spirit of nitrous ether to it, and a few drops of liquor potassæ to make it clear.

126/8. *Dalkin.*—**Preservation of Leeches.** — See our issue of September 1, 1888.

118/9. *Cocaine.* — The cement given on page 317, August 31, is suitable for uniting guttapercha to zinc. The latter must be warm at the time the cement is applied.

120/17. *F. W. Wheeler.*—Doubtless the colours of the variegated show-bottle will fade in time, but they will keep long enough to create a sensation. What we stated last week is correct. Aniline colours sometimes last for a year, but are often completely destroyed in a month. Alkanet in oil will keep for a long time, if not exposed to direct sunlight. The same applies to cudbear.

120/1. *Cayenne.*—Look out for our Educational number.

120/70. *McSneezer.* — **Bell Scholarship** candidates are required to take French *or* German, not both.

120/65. *W. A. Thomas.*—You cannot do better than try the Unofficial Formulary recipe for **Cod-liver Oil Emulsion.** See THE CHEMIST AND DRUGGIST, September 21, 1888.

116/61. *H. S.*—Mineral oils do not oxidise on exposure to the air, but sperm and rosin gradually do.

120/61. *Benzoin.*—**Oil of Man.**—Oleum animalis is generally given for this. **Herring oil.**—Olive oil, with a drop or two of trimethylamine per ounce, would do.

120/2. *Camphor.*—**Gould's Hop Bitters** prescription.—There is a full rendering of this in our issue of January 28, 1888, p. 139.

Information Wanted.

[*Replies to the following requests are solicited by correspondents of* THE CHEMIST AND DRUGGIST.]

109/14. Knight's metallic marking-ink. Where obtainable.

116/65. Formula for making **Black Beer**, as sold in Lincolnshire and Yorkshire.

88/72. A specific for red worms or snakes in pheasants. "Shah" has tried cayenne pepper, friar's balsam, ether, and liq. arsenicalis with poor results. Is there anything better?

115/70. **Blue and Red Tiver.**—Will some agricultural readers recommend a good place to obtain the above, soft and free. "Sussex" believes it comes from the West of England. What the London houses supply is as hard as a brick, and of no use for marking sheep.

120/9. A good recipe for making polishing cream for patent leather and glace goods, something similar to "Brown's Meltonian Cream."

120/71. What is used in potteries for printer's tar?

ONE of the latest novelties in the application of electricity consists of an electric reading-lamp, which is being fitted to the carriages on the main line of the South-Eastern Railway. It is on the principle of the "put a penny in the slot" automatic machines. The apparatus is situated immediately over the passenger's head and under the rack, and is contained in a small box 5 inches by 3. The light is of five-candle power, and is obtained by the introduction of a penny at the top of the box, and by a subsequent pressure of a knob, and will last for half an hour, extinguishing itself at the end of that time automatically. For more light more money has to be put in the box, but if the lamp is out of order the penny drops right through and the payer regains it.

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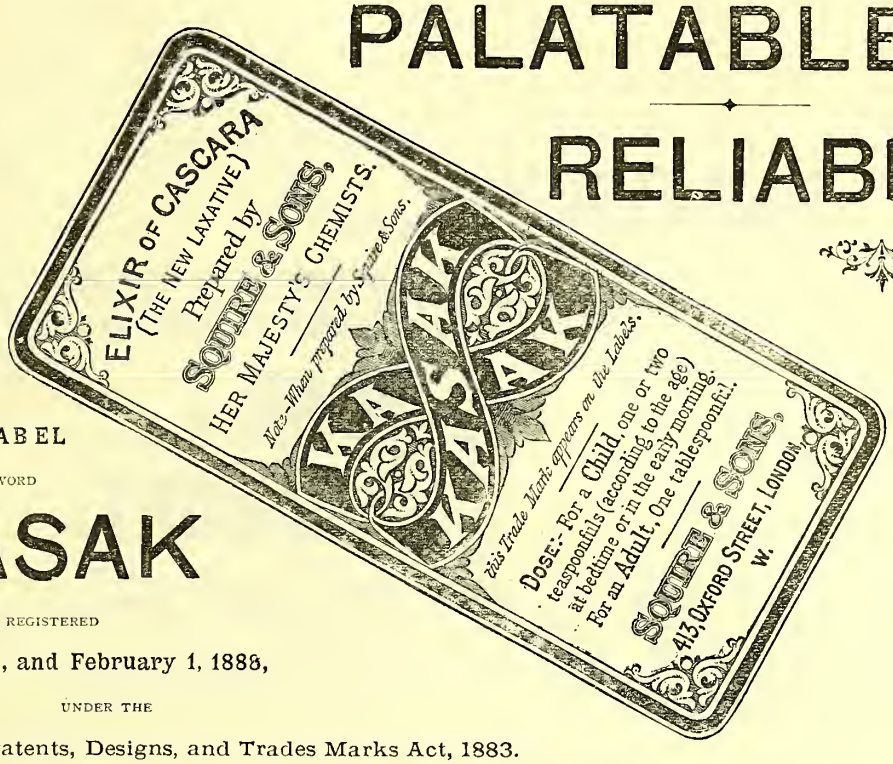
RELIABLE.



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WERE REGISTERED

January 11, and February 1, 1888,

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SELECTED DRUGS AND PURE CHEMICALS.

Preparations of the British and other Pharmacopœias.
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Lozenges of the British and Throat Hospital Pharmacopœias.
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GRANULAR EFFERVESCING CITRATE OF MAGNESIA.

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DRUGGISTS' SUNDRIES.

Telegraphic Address—
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Monthly Price Lists on application, and special quotations for quantity.

REGISTERED TRADE MARK. *SQUIRREL BRAND.*

ARTHUR S. HILL & SON

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Wholesale and Export **Druggists**
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DALMAHOY'S EAU DE MENTE PECTORALE
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The ſupply of our well-known

AMMONII CARB. RESUBLIM. VOLCANIC.

being inſufficient, we are introducing a new article, which is excellent in every reſpect, and which can ſafely be recommended to take the place of the above.

It is pure, and free from tar products.

Specify, when ordering,

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MANUFACTURING CHEMISTS

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DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,

COVENTRY.

WYLEYS' PEARL-COATED PILLS.

All mixing, cutting, rounding, picking, &c., is accomplished with the aid of steam machinery, by which means we attain a uniformity in composition and size such as cannot be equalled by hand-work.

For finish, and general good appearance, they will compare most favourably with any in the market.

WYLEYS' GELATINE-COATED OVAL PILLS.

The only oval gelatine-coated pills of English manufacture in the market.

Our "Prices Current" contains an extensive list of coated pills, showing formulæ and prices, together with a number of TESTIMONIALS. Estimates for private formulæ supplied.

PODOPHYLLIN PUR.

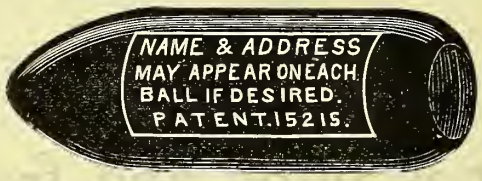
(STANDARDIZED).

Finding great variation to exist in commercial samples, not only in regard to solubility in Rectified Spirit and Ammonia, but also in respect to the amount of the active portion of the resin (Podophyllotoxin), we have commenced the manufacture of this article. We can, therefore, supply *Resina. Podophylli* of guaranteed purity and standardized to a definite strength. Owing to its freedom from decomposition products and the non-employment of alum (which gives the bright yellow variety), our product is distinguished by being nearly white.

Price 2s. per oz.

THE DURAPLASTIC COATED HORSE BALL.

(PATENTED.)



"The obvious superiority of these balls over the old paper-wrapped articles will impress the most stolidly conservative of farmers."—*The Chemist and Druggist*, October 27, 1888.

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WYLEYS & Co. will be glad to prepare Patent Duraplastic Balls from private recipes.

NAME and ADDRESS may appear on orders of 2 gross assorted balls.

CRESCENT TRADE B.M&Co. MARK. BRAND.

BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

ANALYSIS.

Bicarbonate of Soda	97·20
Mono Carbonate of Soda	1·90
Sulphate of Soda	trace
Chloride of Sodium	·035
Moisture	·82
Insoluble	nil

PURE ALKALI,

GUARANTEED 58 DEGREES,

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers, Bleachers, Dyers; Glass, Paper, and Soap Makers.

SODA CRYSTALS

OF THE FINEST QUALITY.

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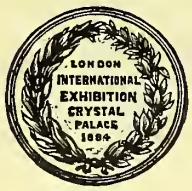

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As Prepared by the Discoverer, SIR JAMES MURRAY, M.D.

FOR OVER 60 YEARS IN USE AS AN EXCELLENT REMEDY FOR ALL DISEASES OF THE STOMACH AND LIVER.

In Summer time, and in warm climates, it is invaluable, as it cools the Blood and improves the system generally

It is the only known Drug which cures that most unpleasant of all maladies, viz., a HEADACHE. In cases of Gout and Indigestion it is indispensable.

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Sold by all respectable Chemists, in **Large sized** Bottles (the 1s. size containing nearly **Double the Quantity** usually sold at that price), at **1s., 2s. 6d.,** and **3s. 6d.** each. Also in Winchester Quarts for Dispensary and Hospital use.

☞ CAUTION.—Observe the SIGNATURE of the Inventor on EVERY LABEL.

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SCHERING'S CHLORALAMID

New and Improved Hypnotic, Patented and Registered.
Is free from all unpleasant by or after effects usually observed with hypnotics hitherto used.

Sold by all Retail and Wholesale Chemists and Druggists.

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MOONSEED BITTERS brings FULL PRICES.

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It is also sold at 4/6.

MOONSEED OINTMENT.

Retails at 1/1½, 2/9, 4/6 per box.

Memorandum of Agreement made this.....day of..... 1889, between A. E. POWELL & COMPANY, of Swindon in the County of Wilts, Proprietors of the Moonseed Bitters and Moonseed Ointment (hereinafter called the "Vendors"), of the one part and ..... of .... (hereinafter called "the Purchasers"), of the other part.

Whereby it is mutually agreed between the said parties hereto as follows:—

In consideration of the Vendors selling to and supplying the Purchasers with Moonseed Bitters, Moonseed Ointment, and other preparations manufactured and sold by them (hereinafter termed "the Goods") at their usual prices, the Purchasers will observe and perform the following terms and conditions:—

1. The Purchasers to sell the Goods retail for full printed prices only, and for each and every Bottle or Box of Moonseed Bitters, Ointment, or Pills sold by him or them at any less price, without the written consent of the Vendors, the Purchasers shall pay to the Vendors the Sum of Twenty Shillings in the nature of a penalty, to be recoverable as ascertained liquidated damages.

2. The Purchasers not to supply any Wholesale House nor to sell the Goods wholesale to any Chemist or Druggist or Medicine Vendor who will not previously enter into an Agreement to retail the same at prices in accordance with the preceding Clause No. 1 of these presents.

All Purchasers who have signed a similar form of Agreement to the foregoing will be supplied upon the Vendors' usual trade terms, but those Purchasers who do not sign a similar form of Agreement to be supplied upon the following terms only, namely:—RETAIL, 4*s.* 5*d.* for each and every 4*s.* 6*d.* Box or Bottle, 2*s.* 8*d.* for each and every 2*s.* 9*d.* Box or Bottle, and 1*s.* 0½*d.* for each and every 1*s.* 1½*d.* Box or Bottle—net in all cases. WHOLESALE, 4*s.* 4*d.* for each and every 4*s.* 6*d.* Box and Bottle, 2*s.* 7*d.* for each and every 2*s.* 9*d.* Box or Bottle, and 11½*d.* for each and every 1*s.* 1½*d.* Box or Bottle—net in all cases. This Agreement and the terms and conditions herein contained to remain in full force and virtue for the term of 7 years from the first day of March, 1889.

As witness the hands of the said parties hereto the day and year first above written.

We call attention to the important steps which we have taken to prevent our specialities being retailed at less than the advertised prices, and we ask the co-operation of the Trade in maintaining the integrity of the scheme whereby the sale of our preparations may always be retained by the legitimate trade. We will not only endeavour, by all means in our power, to prevent the advertised prices being "CUT," but will give Chemists every assistance and facility for making this a large as well as a paying business.

Please write for Terms and Form of Agreement. NOTE that we allow retailers of Moonseed Bitters 2*s.* 6*d.* per thousand for the Distribution of Pamphlets.

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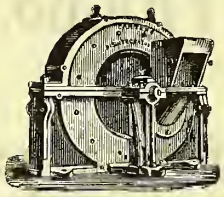
CARTER'S DISINTEGRATORS

Will Pulverise, Granulate, or Shred almost any Mineral, Vegetable, or Animal Substance.



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For Grinding Sugar, Bark, Linseed, Ginger, Pepper, Spices, Salt, &c., this Machine is invaluable. Made in 9 Sizes. Illustrated Catalogue may be obtained on application.

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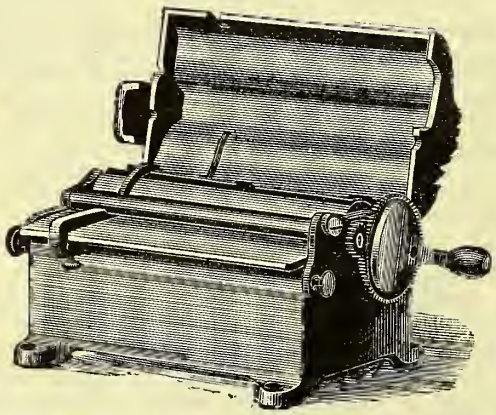

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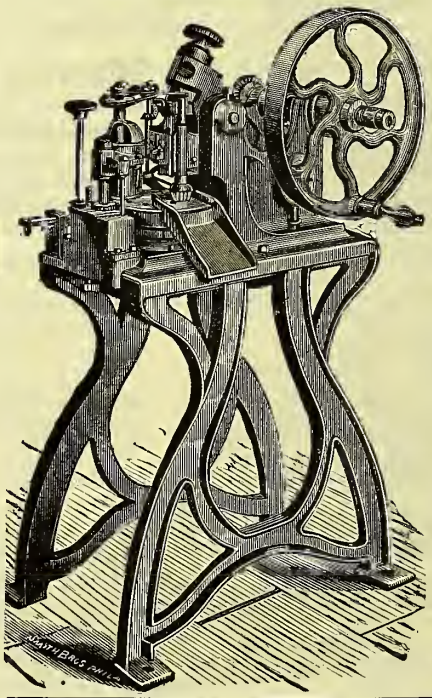

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CREAM OF MALT
(REGISTERED),
WITH COD-LIVER OIL,
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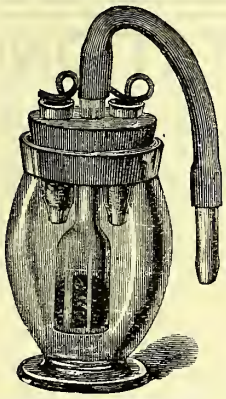
1 part to 5 Sp. Vini Rect. 56 O.P. makes Sp. Æth. Nit. 850.
This concentrated preparation is carefully drawn in our own laboratory, is highly recommended, and is daily finding increased favour with the trade for making Sp. Nitre, as required for use, and thus avoiding the risk of a development of free acid, which is more or less prevalent in Sp. Nitre that has been drawn some time. **Price in Winchester Quarts, 3s. per lb., net.**

Importers of Cod Liver, Castor, and Olive Oils; Otto de Rose, and all Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees Wax, &c., &c. Applications for Special Quotations invited.

BY ROYAL LETTERS PATENT, NO. 16,713.—DECEMBER 20, 1886.



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Catarrhal Throat and Ear Affections, Loss of Voice, Bronchial Asthma, and Hay Fever.
The SIMPLEST FORM OF INHALER.
VERY PORTABLE. CONTAINS NO WATER.
Silver Medal, Brussels Exhibition, 1888. Yields a plentiful cloud of Neutral Vapour, with little or no effort on the part of the patient.
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Illustrated Prospectus, with the "History of Chloride of Ammonium as a Remedial Agent," free by post. SOLE MAKERS—
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MANUFACTURING CHEMISTS,
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RECOMMEND THEIR
PURE PREPARATIONS OF PEPSINE
Guaranteed to answer the tests of all authorised authorities, and superior to any made, whilst the price is considerably lower.

THIS TESTIMONIAL IS SELECTED AMONGST OTHERS.

DEAR SIRS, BIRMINGHAM, *November 23rd*, 1867.
We have received a supply of your "Pure Pepsine Porci," and find that 20 grains dissolve (or digest) three hundred and sixty grains of dry fibrin. This result we consider to be very satisfactory, and we can therefore confidently recommend your preparation.
To Messrs. CLARIDGE & SON, Warwick. Yours faithfully SOUTHALL, SON & DYMOND.

Also eulogised by DR. LETHEBY in his Lecture before the Society of Arts in London.

PRICES—Pepsine Porci Pur., 2s. per 1 oz.; Pepsine, B.P., 2s. per 1 oz.; Pepsine, best English (Amylated), 30 % pur., 10s. per lb.

SPECIAL CHARACTERISTICS.—Superior activity in digestive power, purity, freedom from objectionable odour, and good keeping properties have secured for 25 years the confidence and preference for Messrs. CLARIDGE'S Preparations by the leading London houses.

Order direct, or through any London firm or Shipping house. *Special discount for 25 ounces and upwards.*

PURE CARBONATE OF LITHIA

Price 1,400 fcs. per 100 kilos., or £27 15s. per cwt.

Also all other LITHIA SALTS.

Iodoform, Mercurial Salts, Osmic Acid, Liquid Chloride of Methyl, for the treatment of Rheumatism, Neuralgia, &c. Tannin, Tartar Emetic, Chloral, Terpene.

SILVER BLACK FOR JEWELLERY.

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HYPODERMIC SYRINGE

The Needle is only ½ inch long, and being enclosed by a metal cup prevents the escape of the injection. It causes very much less pain than the ordinary syringe. The syringes are fitted with our patent "Asbestos" pistons, a great improvement over leather pistons, as no lubricant is required, and always ready for use.

PRICES:—

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In case, plated	4	6
In case with bottle, extra quality	7	6

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Special Price List Free by Post.

KEMP'S "WHOOPALINE"

FOR

The Relief and Cure of Coughs, Colds, Bronchitis, Whooping-Cough, Loss of Voice, Difficulty of Breathing, and all Affections of the Chest, Throat, and Lungs.

PRICE 1s. 1½d. and 2s. 9d. PER BOTTLE.

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Suitably Packed for Home and Export, in various Languages, for all Markets.

'COAGULINE' The Best Cement for all Broken Articles.

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ABSORBENT COTTON WOOL.

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COMPOUND ESSENCE OF LINSEED, Aniseed, Senega, Squill, Tolu, &c.

THE Stockport Remedy FOR COUGHS AND COLDS.

OXYMEL SCILLÆ (exceptionally brilliant) Dec. Senegæ Co. Conc.

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GLYCERLINE. *Linum Glycerinum.*

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A Perfumed EMOLLIENT TOILET SOAP.

EMOLLIENT For Chapped Hands, &c.

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Prices, Circulars with Name and Address, Specimens, Show Cards, Glass Tablets, &c., &c., on application.

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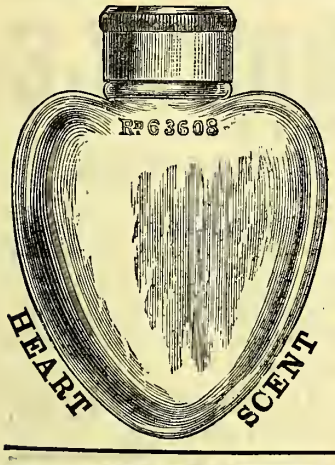

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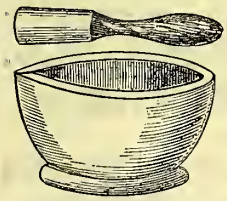

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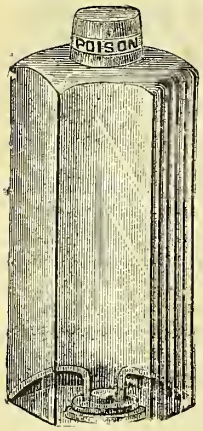

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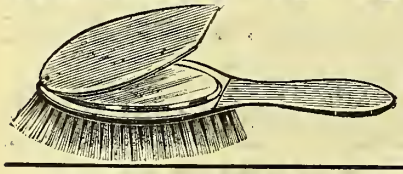

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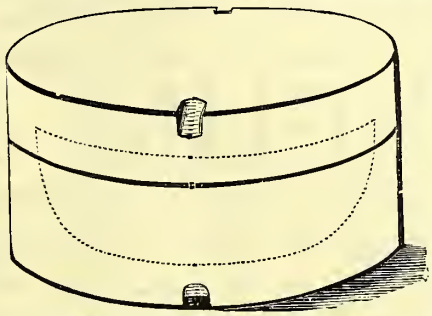

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46 JEWIN STREET, LONDON, E.C.

NEW YORK. MONTREAL. HAMBURG

46

RACKHAM'S

HORSE, CATTLE, & DOG MEDICINES.

HORSE MEDICINES—Condition, Cough, Worm. Physic, Grease, and Colic Balls or Powders: White Oils; Splint and Spavin Ointment; Healing Balm, &c.

Price 2s. 6d. *Post free* 2s. 9d.

CATTLE MEDICINES.—Rackham's Condition Drenches for Cows, Neat Stock, and all Farm Animals.

Price half doz., 4s. 6d *One doz.*, 8s. *Three doz.*, 21s., *free*

DOG MEDICINES.—Distemper, Worm, Tonic, Condition. Purging, Cough, and Jaundice Balls; Katalepra for Mange and Eczema; Ear Canker Specific; Japan Soap, &c.

Price 1s., 2s. 6d., *and* 5s. *Post free* 2 *stamps extra.*

Rackham's Houndmeal and Norfolk Meat Biscuits, 16s. cwt.

RACKHAM & CO., Upper Goat Lane, NORWICH.

PATRONISED BY HER MAJESTY.

BARBER'S ORIGINAL
CRIMSON MARKING INK,

WHICH IS CHANGED BY HEAT TO A JET BLACK.

Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bottles

ALSO

BARBER'S CONCENTRATED LIQUID COCHINEAL

FOR COLOURING JELLIES CUSTARDS, ETC.

Put up in 6d. and 1s. Bottles.

ALSO BARBER'S ARTIFICIAL IVORY FOR FILLING DECAYED TEETH,
1/- per Packet.

MANUFACTURED ONLY BY THE PROPRIETORS—

G. BARBER & CO., CLUB MOOR, LIVERPOOL.

Can be obtained through any of the Wholesale Firms in Great Britain, or from FELTON, GRIMWADE & CO., Melbourne; ELLIOT BROS., Sydney and Brisbane; KEMPTHORNE, PROSSER & CO., Dunedin and Auckland; FELTON, GRIMWADE & CO., Wellington; or direct from the Manufacturers—G. BARBER & CO., Club Moor, Liverpool, England.

H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-, 10/6, 21/-
Egg Julep, 2/-, 4/-.
CONCENTRATED Egg Julep, 2/6, 5/-, 10/6.
Golden Fluid, 10/6, 21/-.
EUXURON 1/6.
&c.

Stimulating Lotion, 5/-, 10/6.
Astringent and Tonic Lotion, 5/-, 10/6.
Quinine and Arnica Hair Wash, 3/6, 5/-, 10/6, 21/-.
Arnica Wash, 3/6, 5/-, 10/6.
&c.

EUCHRISMA.
Combines in one oleur Fluid every valuable Component both of a Hair Grease and Wash, 3/6, 5/-, 10/6, 21/-.

EAU RACINE.
For renewing the original colour of Grey Hair; superior to all other Restorers, being perfectly simple in its Components. Price 6/-.

An elegant Preparation for the Hair and Beard. Price 2/6, 3/6, 5/-, 10/6, 21/-.

BRILLANTINE.

H. P. TRUEFITT'S TONIC TOOTH BRUSH
(BY ROYAL LETTERS PATENT.)
PRICE ONE SHILLING.

20 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

GREENSILL'S THE ORIGINAL

When ordering from **MONA** AND ONLY GENUINE.

Wholesale Houses please specify "*GREENSILL'S.*" **BOUQUET**

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LOCH PARADE,

DOUGLAS, ISLE OF MAN.

HORN & SON.
OFFICES FOR BRITISH AND FOREIGN
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Guide to New Patent Law and Registration gratis.

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SPECIALITIES: Glycerine—Gum Arabic—Gum Tragacanth—Pure Beeswax—Honey—Vanilloes.

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MARK STREET MILLS,
NETHERFIELD ROAD NORTH,
LIVERPOOL.
TRADE MARK.
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DRUG AND GUM MERCHANTS AND IMPORTERS,
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SPECIALITIES—
Arabic and Varnish Gums, Glucose, Glycerine, Beeswax, Honey, Rhubarb, Insect Powder, Saffron, &c., &c.
Country orders for original packages included in public sale purchases at fractional margins.

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METH. SPIRIT Established 1840. AND FINISH.
J. & D. MACNAIR & CO., 19 Robert St., MANCHESTER, and Bridgeton, GLASGOW.
Send for prices and samples.
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MANUFACTURERS OF
GLUE, SIZE, GREASE, &c.
NEWARK-ON-TRENT, NOTTINGHAMSHIRE.

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PERFUMES, No. 30.
FIFTY KINDS.
9s. for 20 oz., Carriage Paid.
Samples of any kind for 2 stamps.
When buying, compare my Perfumes with other makers', and buy the best.
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London Agents—Messrs. BAISS BROS. & CO., Mr. WILLIAM TOOGOOD.

PRECIPITATED CHALK, WHITEST AND PUREST.
CHEAPEST SELLERS IN THE MARKET.
ALSO CHEMICALS, DRUGS AND OILS.
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GEORGE HAYNES & CO.
Hampstead Cotton Mills, Cherry Tree Lane, Stockport,
MANUFACTURERS OF
BLEACHED AND ABSORBENT WOOLS,
Grey Wool, Coloured Wools, and Jewellers' Sheets.
WHOLESALE AND EXPORT ONLY.
Telegraphic Address—"HAYNES STOCKPORT."

Jn. GIRAUD FILS
FINE PERFUMERY AND TOILET SOAPS,
GRASSE, FRANCE.
FIRST PRIZES AWARDED AT EVERY EXHIBITION
Large Gold Medal at Nizza, 1884. First Order of Merit, with Special Mention, at the Melbourne International Exhibition, 1888-1889.
SPECIALITY.—Essences, Toilet Waters, Extraits and Soaps à la Violette de Nice et de Grasse.

J. BROTHERS & CO.
MANUFACTURING CHEMISTS,
AND WHOLESALE AND RETAIL DRUGGISTS,
KALBADEVIE ROAD, BOMBAY.
Agencies and Consignments of Goods solicited.

S. SAINSBURY'S
Prepared from the finest English Lavender and other most choice Scents. **Lavender**
176 & 177 STRAND, LONDON. **Water.**
Wholesale and Shipping terms on application.

EMP. ADHÆSIVUM OPT.
16 INCHES WIDE.
On Glazed Calico, 2/9; on Shirting, 4/3 per doz. net cash
JOHN QUILLIAM & CO., Plaster Works, Cowburn Street, Manchester.
[3]

PERFUMES
TRIPLE. EXTRACTS. CONCENTRATED.
8s. 6d. per Pint; Three Pints, 8s. 3d.
JOHNSON & CO., Wormald Row, LEEDS.

THE ALOFAS REMEDIES
TINCTURES, PILLS, OINTMENTS, EMBROCATION, ETC.
AGENTS WANTED (will be Advertised in Local Papers). Write for Pamphlet and terms, post free.
THE ALOFAS COMPANY, Central Depot, 20 New Oxford Street, LONDON, W.C.

FOUND DEAD
BY SANFORD'S RAT POISON.
"I have found 145 rats killed in my farm buildings by it."—C. Wilson Offord.
"It is the most certain remedy I have ever tried. Little pellets about, the size of a pea are put in the rat holes or in their runs. I destroyed over 200 rats from one dressing with it."—C. Cook, Grange Farm, Ellesmere, Salop. It is, without doubt, the best ever introduced. Price 6d., 1s., 2s., and 3s., of Chemists.
SANFORD'S MICE POISON for Houses, Buildings, Corn Stacks, &c. Cannot be excelled. Has given entire satisfaction for the past 28 years. In packets 3d., 6d., 1s., and 2s. each, with directions for use, of SANFORD & SON, Sandy, Beds. Liberal terms to Chemists. Wholesale of Barclay & Son, Sanger & Son, Newbery & Sons, Edwards, and others, London (England).

MUSK
EDMOND RAQUET,
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PURE WHITE BEESWAX
Guaranteed pure, of the best quality, in blocks, cakes, or other forms.
Candles, and all other articles manufactured of Beeswax, at the lowest possible prices.
QUOTATIONS FREE ON BOARD HAMBURG AND OTHER PORTS.
Lüneburger Wax Bleaching Works, Lüneburg (Germany).

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HOMŒOPATHY
AGENTS WANTED. The "ACME" AGENTS' CASE, £3 3s.—Retail Value, £9.
HOMŒOPATHY
PHOTO-PRINT of this HANDSOME CASE free on receipt of Post Card.
HOMŒOPATHY
WATSON & WATES, 93 Leadenhall St., LONDON, E.C.

CHALMERS' PATENT SAMPLE AND PARCELS POST BOX.
THE ONLY BOX
That fulfils ALL the requirements of the POST OFFICE.

Is fastened INSTANTLY.
Cannot open by accident.
Is immensely strong.
Has no corners.
No seams, joints, nor solder.
Nothing to scratch or tear letters.
Is practically air-tight:—Is used for Flour, Cherry Blossom, Sanitas, and Soap-Powders.
Dispenses with string, bags, and paper.
Saves 19 minutes out of 20.

94,500 SOLD IN THREE MONTHS
SAVING THEIR OWN COST.
W. B. CHALMERS, 37 MINCING LANE, E.C.

B. NOAKES & CO.

142 SPA ROAD & DOCKLEY ROAD, BERMONDSEY, LONDON, S.E.

METALLIC CASK MANUFACTURERS & TIN-PLATE WORKERS.

STEEL BARRELS,

Capacity 40 to 120 Gallons,

AS PER ILLUSTRATION.

IRON KEGS, IRON DRUMS,

SUITABLE FOR

All kinds of Chemicals, Varnishes, Paint, Spirit, &c.

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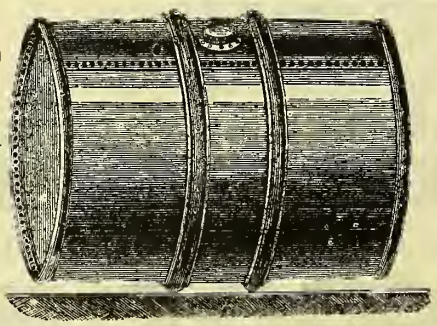

These large Steel Casks, similar to sketch, can be handled with equal facility to wooden barrels, and, owing to their strength and durability, can be used over and over again for an indefinite period. They are perfectly liquid tight, being tested at a very high air pressure, and, unlike wood, do not absorb any of the contents. They are all fitted with interchangeable screw bungs, and can also be fitted with screw plug in head, for draw-off tap.

They are specially adapted for all kinds of Chemical Products, Sulphuric Acid, Glycerine, Spirits, Oils, Turpentine, Petroleum, Benzoline, Varnishes, Tar, Naphtha, Mineral Extracts, and Inflammable Liquids of every description.

We are making them in three qualities, "Black Steel," "Lead Coated," and "Tinned."

PRICE LIST ON APPLICATION.

NOAKES' PATENT LEVER TINS.

AIR-TIGHT TIN.
NOAKES' PATENT.

Opens without a Knife.

"No better tins can be found."—*European Mail*, 9th May, 1889.

Eminently suitable for packing MIXED PAINTS, SYRUPS, FRUITS, CREAM, HONEY, JAMS, &c.

Eminently suitable for packing CONFECTIONERY, DRUGS, TEA, POWDERS, &c.

Levering open with a Coin.
NOAKES' PATENT.

Closes without Solder.

"A Tin which can safely be recommended to the attention of packers."—*The Grocer*, 30th July, 1887.

Patent Rings, Lids, and Bottoms, supplied loose for Export, or to Firms making their own Tins.

THE NEATEST TIN. THE MOST AIR-TIGHT TIN. NO SHARP EDGES. NO CUT FINGERS.

"Possesses important advantages over others of a somewhat similar kind."—*British Trade Journal*, 1st July, 1887.

NO SOLDER USED. NO KNIFE REQUIRED. EASILY OPENED. EASILY CLOSED.

EVERY OTHER DESCRIPTION OF BOX FOR CHEMISTS

Such as Decorated Tin Lozenge & Tooth Powder Boxes, Round, Square, or Oblong, &c.

In the High Court of Justice, Chancery Division.

GRIFFIN *v.* NOAKES, 1887. G. No. 1188.

Patent Self-Fixing Lever Tins.—**This action has now been decided in our favour.**

WRITE FOR PRICE LIST No. 6.

B. NOAKES & CO., BERMONDSEY, LONDON, S.E.

BOXES FOR

Baking Powder.
Brushes.
Bottles.
Camphor.
Capsules.
Cotton Wool.
Disinfectants.
Confectionery
Essential Oils.
Perfumery.
Fancy Soaps.
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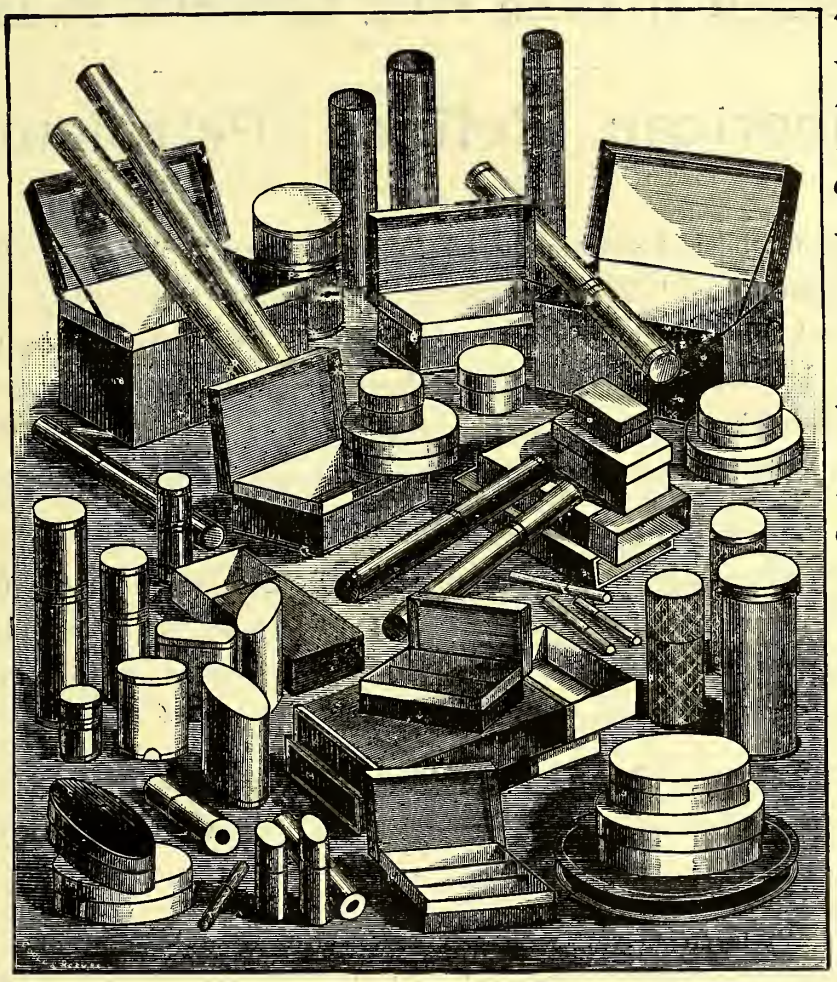


Sponges.
Feeding Bottles.
Starch.
Tobacco.
Cigarettes.
Postal Purposes.
Coffee.
Syringes.
Tooth Stopping.
Plasters.
Hair Preps.
Cosmetiques.
Photographs.
Jellies.
Cement.
Lozenges.
Horse Powders.
And For Export.

ESTABLISHED OVER HALF A CENTURY.

Send your Sample for estimates and compare prices.

Austin & Co.

Workmanship and Punctuality guaranteed.

PATENTEES AND MANUFACTURERS OF

FANCY CARD & OTHER BOXES, ROUND, OVAL, OR SQUARE.

Office and Warehouse } 8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.

Steam Works—BROAD YARD, TURNMILL STREET.

ANGLO-AMERICAN OIL COMPANY, Lim.

LONDON. HULL. GREAT YARMOUTH.
LIVERPOOL. NEWCASTLE. LYNN.
BRISTOL. SOUTH SHIELDS. STOCKTON.

HEAD OFFICES—16 ST. HELENS PLACE, BISHOPSGATE ST., LONDON, E.C.

American Refined Petroleum.

The long established superiority of **"Tea Rose," "Royal Daylight," "White Rose,"** and **"Westminster"** American Petroleum Oils, manufactured by the Standard Oil Company of the United States, is well known to the Trade and to Consumers, and no Oils are so widely and justly celebrated. Their superior burning qualities, freedom from odour and from any tendency to smoke, and their general excellence, have placed them above comparison with any and all other brands.

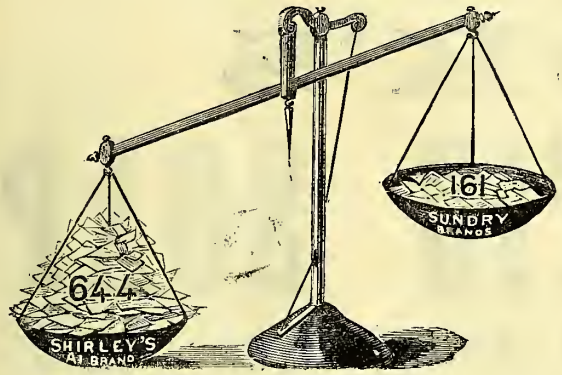
In order to meet the largely increasing demand for these oils, and the better to supply the Trade generally, we have arranged to import them from the United States in bulk as well as in barrels. We shall fill the Oil which we import in bulk into barrels at our own wharves, and as our cooperage facilities are modelled upon the best American methods, buyers will receive the Oil in tight and clean packages.

Our Tank Steamers, **"Manhattan"** and **"Bayonne,"** in their construction, arrangements, power and size, are in advance of any tank steamers afloat, and each has a carrying capacity of 4,000 tons, equivalent to 28,000 barrels of Oil by each steamer.

We shall keep large stocks of these Oils constantly on hand at all our Importing Centres and Depôts, and in this manner be able to supply the Trade promptly. Being the representatives in the United Kingdom of the Standard Oil Company, of America, we are in the best possible position for supplying the trade on the most favourable terms.

To cover the special requirements of London buyers, we have completed the construction of a large Storage Wharf at Purfleet, which will be worked in connection with our Depôts at—

AILSA STREET, BOW CREEK, E.
CANAL WHARF, CHALK FARM ROAD, N.W.
ALBANY WHARF, ALBANY ROAD, CAMBERWELL, S.E.



FACTS SPEAK FOR THEMSELVES!

Results of a Voting recently held in the pages of the *British and Colonial Druggist*, as to the most popular maker of various articles sold by Chemists, reveal the following indisputable facts under the heading of **Menthol Cones**:—

Votes for—

Hockin, Wilson & Co.	65
Christy & Co.	63
Maw	28
Castle Brand	5
	161

Votes for

Shirley's A1 Brand 644

So that out of 805 votes, **SHIRLEY'S BRAND** obtains **80 per cent.**, whereas all other brands *put together* obtain only 20 per cent.

THE REASON IS NOT FAR TO SEEK.

Many correspondents write as to their trade in Menthol Cones increasing, one stating, "I think the handsome pedestals sent out by the various firms are largely the cause." *This is perfectly true.* Every endeavour has been made to assist the retailer in selling

SHIRLEY'S A1 BRAND MENTHOL CONES,

By giving Show Cases, Dummy Cones, and, lately, a China Figure, as show stands, all of which ideas have been carefully copied by other makers. Again, hundreds of thousands of hand bills have been circulated througout the country, drawing attention to the uses of Menthol, so that no other result could be expected but an increase in sales. *The Trade is, therefore, earnestly asked to support the house which has REALLY MADE THE SALE OF MENTHOL WHAT IT IS.* Shirley's A1 Brand has long been recognised as the leading brand, which is confirmed by above voting, and in the future, as in the past, no effort will be spared to assist the retail trade.

The Chemist and Druggist says:—Mr. Arthur W. Shirley has produced a very attractive biscuit china figure, represented in the annexed engraving. The advertisement is effective without being at all vulgar, and the little crier, we expect, will soon be a familiar figure about the country.

THIS ELEGANT BISCUIT-CHINA FIGURE, AN ORNAMENT TO ANY SHOP,

GIVEN AWAY

To Purchasers of 25/ worth of

SHIRLEY'S A1 BRAND MENTHOL

OR TWO IF 40/ ORDER IS PLACED.

The following special parcels have been arranged to suit all classes of trade:—

PARCEL 1. 25/.	PARCEL 2. 25/.	PARCEL 3. 25/.	PARCEL 4. 25/.
4 doz. 2*d*. 1 doz. 3*d*. 2 doz. 3½*d*. 3 doz. 4*d*. 2 doz. 6*d*.	4 doz. 6*d*. 2 doz. 4*d*. 1 doz. 1*s*.	3 doz. 3*d*. 2 doz. 1*s*. 1 doz. 4*d*.	1 doz. 9*d*. 2½ doz. 1*s*. ½ doz. 1*s*. 6*d*.
PARCEL 5. 40/.	**PARCEL 6. 40/.**	**PARCEL 7. 40/.**	**PARCEL 8. 40/.**
4 doz. 2*d*. 2 doz. 3*d*. 3 doz. 3½*d*. 5 doz. 4*d*. 4 doz. 6*d*.	5 doz. 6*d*. 3 doz. 4*d*. 2½ doz. 1*s*.	4 doz. 6*d*. 4 doz. 4*d*. 1 doz. 9*d*. 2 doz. 1*s*.	4 doz. 1*s*. 2 doz. 9*d*. ½ doz. 1*s*. 6*d*.

☞ By calculating what each of the parcels would realise when sold, it will be found that they yield an average profit of 80 per cent. to the retailer on his outlay.

The following Patterns can be well recommended as Saleable:—

	Doz.
No. 6. Boxwood Pedestal, printed directions	3/6
„ 11A. „ „ „ „	3/0
„ 14A. „ „ „ „	6/3
„ 17s. „ Draughtsman „ „	3/9
„ 17L. „ „ „ „	6/6
„ 17L. Ebony „ „ „	6/6
„ 100. 2*d*. Willow Round Box 13/ grs.	1/5
„ 101. 3*d*. „ Acorn, 2 dz. on card 17/ „	1/10
„ 32. Quite new. Menthol on boxwood mount, covered with a metal composition, assorted colours, in glass-lid box; very attractive .. .. .. per doz.	3/-

	Doz.
No. 111. Large Boxwood Acorn, plain box	7/0
„ 112. Boxwood Draughtsman „	3/3
„ 113. „ Cartridge „	3/6
„ 113. „ „ reversible	3/6
„ 107. Willow Pedestal, varnished white	2/3
„ 109. „ „ large „ „	2/6
„ 110v. 1*d*. Vase Shape, 3 doz. on card gross	7/0
„ 114. 2*d*. imitation Boxwood Pedestal 3 doz on card	16/
„ 115. 3*d*. imitation Boxwood Draughtsman, 2 doz. on card	18/

ORDER a Card of A1 MENTHOL AND COCAINE TOOTHACHE TUBES, which you will find give great satisfaction. They are neatly put up in card cases, one dozen mounted on a card, 3/6 per dozen.

ARTHUR W. SHIRLEY, 30 PATERNOSTER SQUARE, LONDON, E.C.

And 11, 12, & 13 ROSE STREET, NEWGATE STREET, E.C.

COOK'S
ANTISEPTIC SOAP

(THOMSON'S PATENT).

A most carefully conducted set of experiments by eminent members of the Medical Profession has established the fact that this Soap is of the highest value in the treatment of ECZEMA, RINGWORM, SCABIES, FAVUS, and other Diseases of the Skin.

It has also been tested in a Physiological Laboratory as a germ destroyer, and proved to be more efficient than any other experimented with.—*See "Journal of the Society of Chemical Industry," 1888. No. 3.*

Messrs. E. COOK & CO. have received from Medical Men numerous communications testifying to the success that has attended the use of this Soap, most of which cannot be published; but Messrs. E. C. & Co. have the permission of many of the writers to show the originals to members of the Medical Profession.

CAN BE OBTAINED THROUGH

MESSRS. S. MAW, SON & THOMPSON, OF LONDON,

OR DIRECT FROM THE MAKERS.

Price, in 3-tablet Boxes, per doz., 12/, Selling Price, 1/6; in ¼-gross Boxes, 10/6 per box.

Messrs. E. COOK & CO. will, with pleasure, send sample, free of charge, to Medical Men on application.

Manufactured by **EDWARD COOK & CO., LONDON,** Makers of COOK'S Celebrated GOLD MEDAL PRIMROSE, MOTTLED, & SOFT SOAPS; also of COOK'S LIGHTNING CLEANSER, and COOK'S HIGH-CLASS TOILET SOAPS.

Speciality—**SAVON DE LUXE.**

Established—NORWICH, 1790; LONDON, 1819.

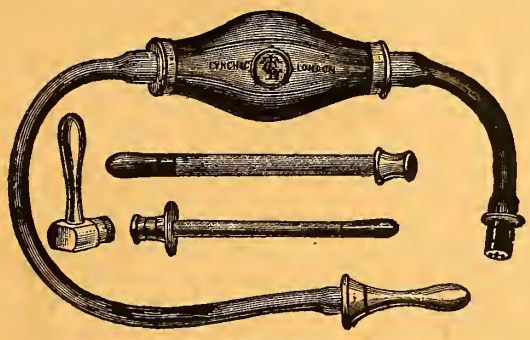
LYNCH'S IMPROVED ENEMAS

FITTED WITH PATENT GLASS VALVES.

(Patent 13,816, dated 12th October, 1887.)

REDUCED PRICES

No. 435 D.



Nos. 436, 437.

Catalogue Number.		£	s.	d.
434	HIGGINSON'S PRINCIPLE, barrel shape, with bone rectum pipe, elastic-gum vagina pipe, to plug on, and patent leather shield, in slide cedar boxes ... ... per doz.	1	12	0
435C	Ditto, ditto, LYNCH'S, requiring no metal mounts, black, green, red, or white, india-rubber, made in one continuous piece, *warranted not to split*, and fitted with bone rectum pipe, in slide cedar boxes...per doz.	1	10	0
435D	Ditto, ditto, with bone rectum pipe, elastic-gum vagina pipe, and leather shield, in slide cedar boxes, „	1	15	0
435E	Ditto, ditto, in oval leather box, complete ... ... „	2	2	0
436	LYNCH'S FAMILY, on Higginson's principle, fitted with bone bulb-pointed rectum pipe for adults, elastic-gum rectum pipe for children, elastic-gum vagina pipe and leather shield, in mahogany box...per doz.	2	8	0
437	Ditto, in slide cedar box ... ... „	2	2	0
437A	LYNCH'S PERFECTION, in mahogany box ... ... „	2	17	0
437B	Ditto ditto in slide cedar box ... ... „	2	11	0
437E	LYNCH'S COMPLETE HOUSEHOLD SYRINGE, consisting of Higginson's Enema with disconnecting mounts, fitted with bone bulb-pointed rectum pipe for adults, elastic-gum rectum pipe for children, elastic-gum vagina pipe, leather shield, and bone pipes for ear, eyes, and nose, in mahogany box, per doz.	4	10	0
	Nos. 436 to 437E can be fitted with bone Angle pipe, at 4/ per doz. extra.			
433B	HIGGINSON'S Enema, with elastic-gum vagina pipe and leather shield, fitted with ordinary valves, per doz.	1	7	6

Discount—10 per cent. Cash Monthly, 5 per cent. Half-yearly Account.

SPECIAL TERMS FOR 6 DOZEN AND UPWARDS.

MAY BE HAD WHOLESALE OF THE PATENTEES—

LYNCH & CO., 192 ALDERSGATE STREET, LONDON, E.C.

AUSTRALIAN BRANCH—15 Vaughan's Chambers, 48 Queen Street, MELBOURNE.

THE BEST NATURAL APERIENT.

The APOLLINARIS COMPANY, LIMITED, London, beg to announce that, as numerous Hungarian Aperient Waters are offered to the public with Marks, Names, and Designations very similar to those which are used for the Hungarian Aperient Water so long imported by them, they have now adopted an additional Label of their own, comprising their Registered Trade Mark of selection, which consists of

A RED DIAMOND.

This Label will henceforth also serve to distinguish the HUNGARIAN APERIENT WATER SOLD BY THE COMPANY from all other Aperient Waters.

TRADE MARK

DEMAND THE DIAMOND MARK,

and insist upon receiving the HUNGARIAN APERIENT WATER of the APOLLINARIS COMPANY, LIMITED, London.

Of all Druggists and Mineral Water Dealers.

Cadbury's Cocoa IS SOLUBLE

and ABSOLUTELY PURE. ABSOLUTELY PURE.

WRIGHT

WHOLESALE & EXPORT DRUGGISTS,
DRUG GRINDERS,

IMPORTERS AND DISTILLERS OF ESSENTIAL OILS,

MAKERS OF

Granular Effervescing Salts. Citrate Iron and Quinine. Ammonio-Citrate Iron.

PEPSIN. EXPRESSED JUICES.

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